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ABSTRACT

This loose-leaf manual provides the detailed rules, guidelines, and examples to be used by the components of the Educational Resources Information Center (ERIC) network in acquiring and selecting documents and in processing them (i.e. cataloging, indexing, abstracting) for input to the ERIC computer system and subsequent announcement in "Research in Education." It also covers the procedures to be followed in maintaining the indexing vocabulary (the Thesaurus of ERIC Descriptors). The major sections of the manual are entitled: Acquisitions, Selection, Handling and Shipping, Descriptive Cataloging, Abstracting/Annotating, Indexing, Vocabulary Development and Maintenance, Journal Article Processing. There are several appendixes, e.g., Acronym Dictionary, Glossary of Terms, ERIC Clearinghouse Scope of Interest Guide, COSATI Cataloging Standard, Identifier Authority List, and the ERIC Directory. This manual will be of interest to all organizations that use the ERIC data base. A detailed index facilitates its use. (WTB)

NOTICE TO

ERIC PROCESSING MANUAL

USERS

1. This Manual has been punched for insertion in a loose-leaf three-ring binder of at least two inch capacity. Please insert the Manual in such a binder as soon as possible to avoid loss or mis-collation of pages, and to otherwise protect an item that will be in heavy use and short supply.

2. For your convenience, we have included an adhesive-backed sheet with a copy of the cover and a spine, which may be used to identify the contents of the binder. To use these, simply cut along the dotted line, remove the backing from each piece, and apply directly to the binder surface.

3. For the further convenience of users, we recommend that dividers with protruding index tabs be inserted for each major section and appendix. Dividers have not been included in this package for reasons of cost, but individuals can easily prepare their own (in accordance with their own needs and use patterns) from standard stock materials.

4. An overall index to the Manual is in preparation and will be forwarded as soon as it can be completed and printed.

ED 092164

ERIC

PROCESSING MANUAL

Rules and Guidelines for the Acquisitions, Selection, and Technical Processing of Documents and Journal Articles by the Various Components of the ERIC Network

July 1974

IR 000 726

EDUCATIONAL RESOURCES INFORMATION CENTER

Sponsored by the National Institute of Education

TABLE OF CONTENTS

	PAGE
PREFACE - ORGANIZATION, AUDIENCE, AND AVAILABILITY OF THIS MANUAL	iii
SECTION 1 - INTRODUCTION	1
SECTION 2 - ACQUISITIONS	25
SECTION 3 - SELECTION	77
SECTION 4 - HANDLING AND SHIPPING	101
SECTION 5 - DESCRIPTIVE CATALOGING	137
SECTION 6 - ABSTRACTING/ANNOTATING	193
SECTION 7 - INDEXING	215
SECTION 8 - VOCABULARY DEVELOPMENT AND MAINTENANCE	257
SECTION 9 - JOURNAL ARTICLE PROCESSING	351
APPENDIXES	
A - Acronyms, Initialisms, and Abbreviations Dictionary	A 1-5
B - Glossary of Terms	B 1-16
C - ERIC Clearinghouse Scope of Interest Guide	C 1-48
D - COSATI Standard for Descriptive Cataloging of Government Scientific and Technical Reports (AD-641 092)	D 1-27
E - Report Series Codes, An Introduction	E 1-13
F - Identifier Authority List (Mostly Commonly Used Identifiers, Showing Preferred Word Form)	F 1-8
G - ERIC Directory (Telephone, Address, Staff Members)	
INDEX	

ORGANIZATION, AUDIENCE, UPDATING, AND AVAILABILITY OF THIS MANUAL

The ERIC Processing Manual provides the detailed rules, guidelines, and examples to be used by the components of the network in acquiring and selecting documents and in processing them (i.e., cataloging, indexing, abstracting) for input to the computer system and subsequent announcement. It also covers the procedures to be followed in maintaining the indexing vocabulary (the Thesaurus of ERIC Descriptors). This Manual is of interest to all organizations engaged in making use of the ERIC data base (input procedures dictate retrieval strategies) and is therefore made available for public sale.

ORGANIZATION

The Manual is organized in a loose-leaf format in which revised and additional pages may be incorporated. Such pages will be issued periodically throughout the year, as needed, and should immediately be interfiled in their appropriate location and obsolete pages discarded.

Page numbering is continuous throughout the body of the Manual, with each appendix numbered separately. It is recognized that continuous pagination presents problems for a loose-leaf publication, particularly one with an index. Nevertheless, in order to aid the user of the Manual as much as possible, it was deemed necessary to go to the simplest possible numbering scheme.

Additional pages, added to the middle of the Manual during the revision process, will be numbered with letter suffixes, e.g., 37A, 37B, 37C, etc. Periodically the Manual and its index will be totally revised and re-paginated.

Each major Section is numbered and within each section topics are decimal-numbered down to the third level, e.g., 4.3.15, in order to assist in showing relationship and subordination between topics when they extend over several pages. Paragraph numbering to additional levels was not done in order to avoid excessively long numbers. Decimal-numbering was selected as preferable to the older outline scheme (e.g., I.A.1.a.(1)(a)) and because it better facilitates possible future expansion.

Each major section of this Manual is preceded by a Section Outline and a Summary of Significant Rules. Supporting the detailed procedures are several appendixes consisting of essential reference material that can be consulted when the occasion demands it. In prior manuals, this material was often referred to but never actually provided.

At the end of the Manual there is a detailed Index providing subject access to every significant topic covered in the text. Perhaps no other single improvement being added at this time will lead to more effective utilization of the Manual than this long-sought Index. References in the Index are to page numbers.

AUDIENCE

The ERIC Processing Manual is first and foremost a guide for the components of the ERIC system. It is intended to be a training manual for new document processors and a constant reference for those already trained. It is an essential coordinative tool in ensuring consistency among the many decentralized ERIC Clearinghouses. It should be regarded as an authoritative body of rules and guidelines that have received the approval of Central ERIC management.

Organizations and other users external to the actual ERIC system also have an interest in this Manual, not primarily from the point of inputting material to the system, but rather from the point of view of retrieving material from it. They should be able to rely on this Manual as a description of how the ERIC Data Base is constructed and what its properties are. The more searching and retrieving that is done against the ERIC Data Base, the more interest there will be in this Manual on the part of user organizations.

UPDATING AND AVAILABILITY

Anyone may make suggestions for revision of this Manual. All such suggestions should be transmitted to the Director of the ERIC Processing and Reference Facility*. The Facility will gather all significant suggestions and route copies to the members of the ERIC Committee on Technical Processing. This Committee will evaluate all suggestions and decide whether they should be adopted. Committee membership will include Clearinghouse staff, Central ERIC staff, and ERIC Facility staff. If the Committee accepts a suggestion, it will be written up and forwarded to the ERIC Facility with instructions to issue the change as a revision to the ERIC Processing Manual.

Clearinghouses, and other members of the ERIC network engaged in processing, will all be sent multiple copies of the revision for interfiling in their existing manuals.

* Addresses and telephone numbers for all components of the ERIC system can be found in Appendix G - ERIC Directory.

SECTION OUTLINE

PAGE

1.1 GENERAL 3

1.2 ERIC SYSTEM COMPONENTS 3

- 1.2.1 Central ERIC 3
- 1.2.2 ERIC Clearinghouses 6
- 1.2.3 Commercial Contractors 13
  - ERIC Processing and Reference Facility
  - Current Index to Journals in Education (CIJE) Contractor
  - ERIC Document Reproduction Service (EDRS)
- 1.2.4 Government Printing Office (GPO) 18

1.3 MAJOR ERIC PRODUCTS 19

- 1.3.1 Research in Education (RIE) 19
- 1.3.2 Current Index to Journals in Education (CIJE) 19
- 1.3.3 Thesaurus of ERIC Descriptors 20
- 1.3.4 ERICTAPES 20
- 1.3.5 Document Reproductions 23
  - Microfiche
  - Hard Copy
- 1.3.6 Reference Tools (Providing Access to the Data Base) 23

FIGURES

FIGURE NUMBER	TITLE	PAGE
1-1	ERIC System Components	4
1-2	ERIC System - Processing Interactions	5
1-3	ERIC System - Background/History	7-8
1-4	ERIC Products - Summary List	21-22

1.1 GENERAL

The objective of this Section is to introduce the six major components that go to make up the ERIC system. As shown in Figure 1-1, these are: Central ERIC, the ERIC Clearinghouses, the ERIC Processing and Reference Facility contractor, the CIJE contractor, the ERIC Document Reproduction Service (EDRS), and the U. S. Government Printing Office (GPO), which is, in effect, the printing contractor for Research in Education. (Full mailing addresses, telephone numbers, and the names of major staff for each of these organizations, except GPO, may be found in Appendix G, the ERIC Directory, which is revised approximately every six months.)

Each organization is described briefly in this introduction, highlighting its major functions and responsibilities. The remainder of the ERIC Processing Manual consists of detailed procedures and guidelines for accomplishing certain of these functions, together with various supporting Appendixes which because of their size and specialized content have been separated from the main text. Processing interactions among the system components are depicted schematically in Figure 1-2. An historical introduction to the entire ERIC system, providing some background and explanation for the present decentralized structure is given as Figure 1-3.

1.2 ERIC SYSTEM COMPONENTS

1.2.1 Central ERIC

Central ERIC
National Institute of Education
Washington, D. C.

Central ERIC is located within the National Institute of Education (NIE) and acts as the funding source, policy maker, manager and technical director of the ERIC system. Activities of all other components of the system are monitored by Central ERIC to ensure quality products and services. All questions relating to basic ERIC policies should be directed to Central ERIC.

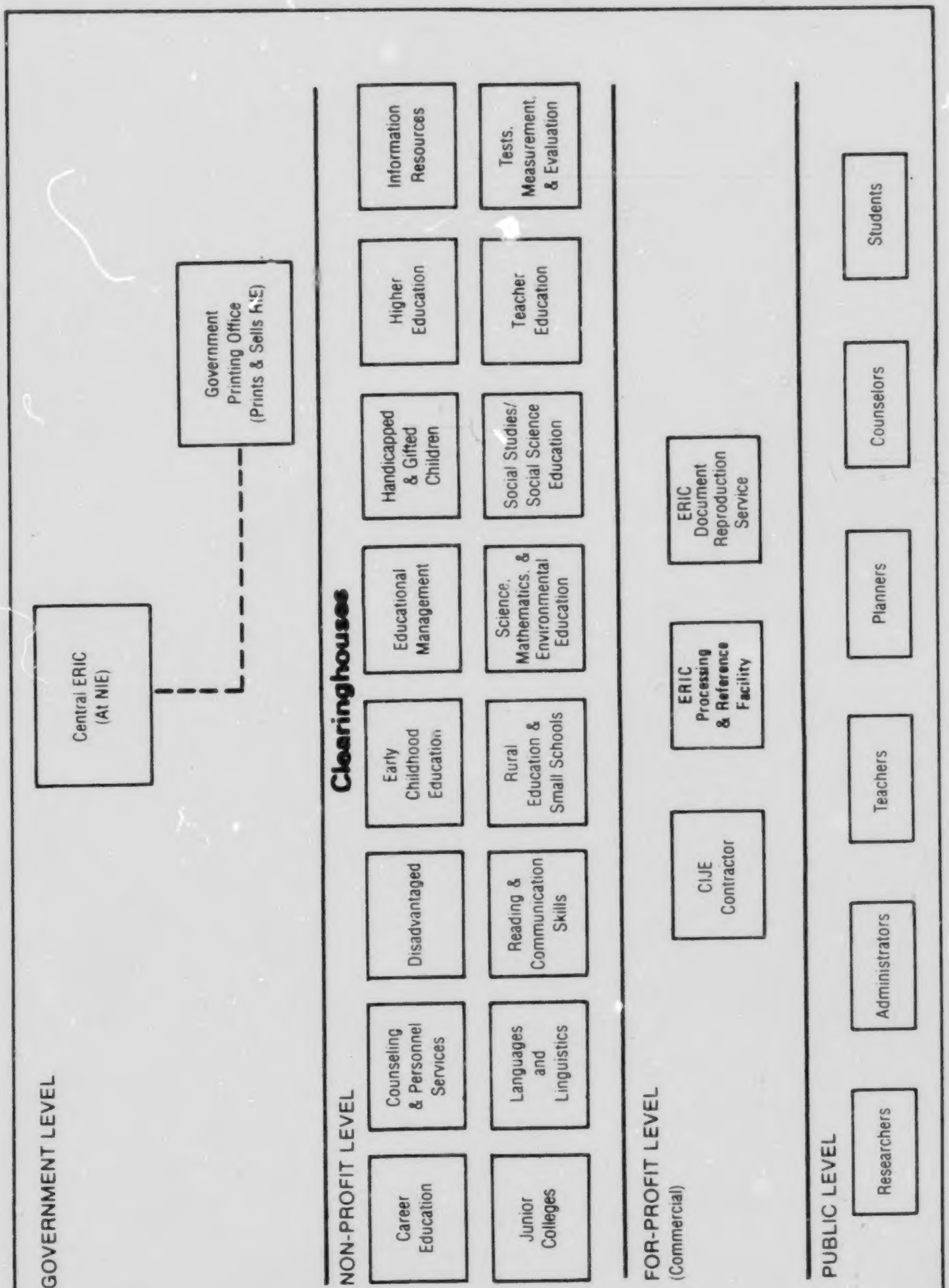
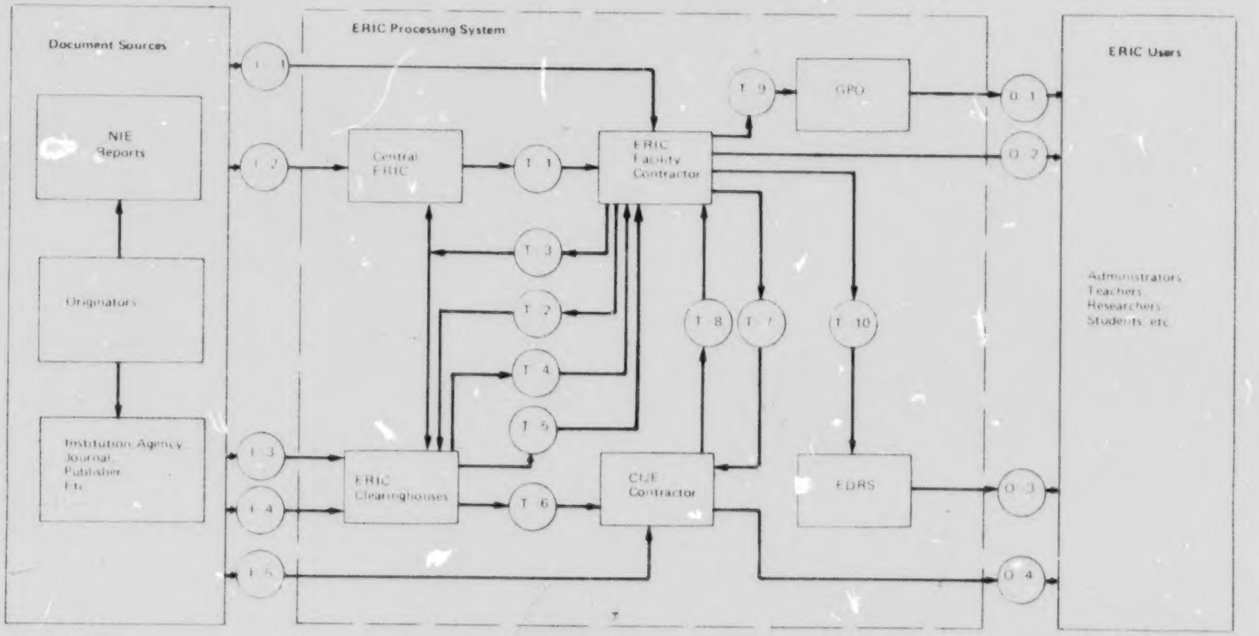

GOVERNMENT LEVEL
Central ERIC (At NIE)
Government Printing Office (Prints & Sells RIE)
NON-PROFIT LEVEL
Clearinghouses
Career Education
Counseling & Personnel Services
Disadvantaged
Early Childhood Education
Educational Management
Handicapped & Gifted Children
Higher Education
Information Resources
Junior Colleges
Languages and Linguistics
Reading & Communication Skills
Rural Education & Small Schools
Science, Mathematics, & Environmental Education
Social Studies/Social Science Education
Teacher Education
Tests, Measurement, & Evaluation
FOR-PROFIT LEVEL
(Commercial)
CIJE Contractor
ERIC Processing & Reference Facility
ERIC Document Reproduction Service
PUBLIC LEVEL
Researchers
Administrators
Teachers
Planners
Counselors
Students

FIGURE 1-1
ERIC SYSTEM COMPONENTS



I - Major Inputs

I-1 Acquisitioned Documents
I-2 Quick Announcement Documents (QADs) for RIE
I-3 **PRIORITY Documents for RIE**
I-4 Education Journals in Clearinghouse Scope
I-5 Education Journals Not in Clearinghouse Scope

T - Major Intra System Transfers

T-1 **PRIORITY Documents to be Processed**
T-2 Acquisitions in Clearinghouse Scope
T-3 Acquisitions Reports, Working Copies of Thesaurus and Source Directory CH/ED Cross Reference Lists, Etc
T-4 Accessioned and Processed Documents and Resumes
T-5 Accessioned, but Not Processed Documents
T-6 Journal Article Resumes
T-7 Thesaurus and MDS Tapes
T-8 CIJE Tape
T-9 RIE Linotron Tape
T-10 Accessioned Documents and SFR

O - Major Outputs

O-1 RIE Sales and Distribution
O-2 ERICTAPE Sales and Distribution
O-3 Microfiche and Hard Copy Sales
O-4 CIJE Sales and Distribution

FIGURE 1-2
ERIC SYSTEM - PROCESSING INTERACTIONS

1.2.2 ERIC Clearinghouses

The ERIC Clearinghouses have responsibility within the network for acquiring the significant educational literature within their particular areas, selecting the highest quality and most relevant material, and processing (i.e., cataloging, indexing, abstracting) the selected items for input to the data base. It is the above procedures that are covered by this Manual. In addition, Clearinghouses provide reference and retrieval services, develop information analysis products, conduct workshops and make presentations, and generate other types of communication links with the educational community. These latter functions are not covered by this Manual.

There are currently 16 ERIC Clearinghouses, located at various points across the United States, each housed at a non-profit institution. The exact number of Clearinghouses has fluctuated over time, in response to changing educational needs and policies.

The major Clearinghouse functions covered by this Manual can be listed as follows:

- Acquisitioning, Evaluating, and Selecting educational resource materials (reports and journal articles)
- Handling and Shipping
- Input Screening
  - Duplicate Checking
  - Reproducibility/Legibility Checking
  - Copyright Checking
  - Level of Processing Determination
  - Labeling (Policy and Copyright labels)
  - Accessioning (logging, assigning number)
- Document Processing
  - Descriptive Cataloging
  - Abstracting
  - Indexing
- Vocabulary Maintenance (suggesting new index terms)

EDUCATIONAL RESOURCES INFORMATION CENTER*

ERIC stands for Educational Resources Information Center. ERIC was originally conceived in the U.S. Office of Education in the mid-1960's as a system for providing ready access to educational literature. At the time ERIC was first discussed, the literature of education was uncontrolled. Research reports, submitted to OE by their contractors and grantees, received an initial scattered distribution and then disappeared. Reports from other sources generally remained equally inaccessible. ERIC was intended to correct this chaotic situation and to provide a foundation for subsequent information analysis activities and attempts to spread the use of current developments.

Because of the decentralized nature of American education, education's many specializations, and the existence of numerous professional organizations, ERIC's designers opted for a network of organizations rather than a single monolithic information center located in Washington. ERIC was conceived, therefore, as a network of "clearinghouses" located across the country in "host" organizations that were already naturally strong in the field of education in which they would operate.

Contracts with clearinghouses originally gave them responsibility for acquiring and selecting all documents in their area and for "processing" these documents. "Processing" includes the familiar surrogation activities of cataloging, indexing, and abstracting. This scheme has worked out very well. Virtually all observers of ERIC have concluded over time that the network of clearinghouses does a better job of ferreting out the current literature of education than one single information center in Washington could ever do. With their specialized subject expertise, clearinghouse staff are well qualified to manage ERIC document selection functions. Decentralization has paid off as well for information analysis and user service activities. However, decentralization was not the complete answer. In order to generate products that included the output of all network components, information gathered by the clearinghouses had to be assembled at one central place. ERIC's final design, therefore, included decentralized clearinghouse operations integrated around a central computerized facility which serves as a switching center for the network. The data recorded by each of the clearinghouses is sent to the facility to form a central data base from which publications and indexes are produced.

Similar arrangements are used to supply the public with copies of reports added to the system. A basic decision for ERIC was to make documents available from a central source instead of just informing users that a given document existed. It was, therefore, necessary to provide a document reproduction service where any non-copyrighted document announced could be obtained. (When permission is obtained, copyrighted materials are also reproduced.) In other words, ERIC was developed as a complete document announcement and retrieval service.

Both of these centralized services had entrepreneurial aspects. The Government obviously could not afford to subsidize every user's document needs. The document reproduction effort had to become self-supporting or it would become too expensive within Federal budgets. Therefore, users had to pay for reports they wanted. In the same way, dissemination of the data base is not subsidized by the taxpayer; persons wanting ERIC magnetic tapes are required to meet order processing, tape, and duplication costs. The Federal Government limits its investment in both areas by generating a fundamental data base and then permitting the private sector to market it at prices as advantageous to the public as possible.

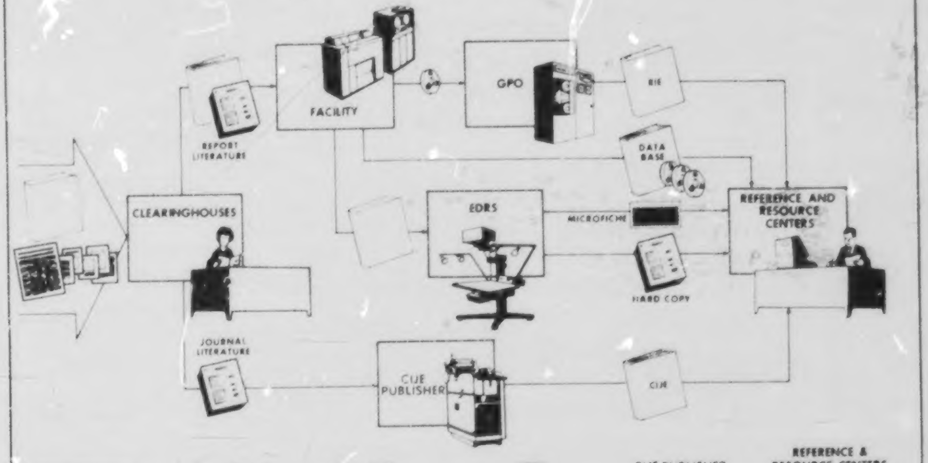
In support of this strategy, and also because central facility operations depended on use of advanced technologies (computerized photocomposition and microreprographic technology), these functions were located in the commercial sector.

*Now located within
National Institute of Education (NIE)
Washington, D. C. 20202

FIGURE 1-3
ERIC SYSTEM - BACKGROUND/HISTORY

ERIC, therefore, emerges as a network with four levels. The first or Governmental level is represented by NIE and Central ERIC (the funder, policy setter, and monitor). The second or non-profit level is made up of 16 Clearinghouses located at universities or professional societies. The third or commercial level consists of the centralized facilities for managing the data base, putting out published products, making microfiche, and reproducing documents. Fourth and last are the users who receive the benefit of these activities.

ERIC NETWORK COMPONENTS



CLEARINGHOUSES

- Subject Oriented
  Acquisition
  Selection
- Abstracting
- Indexing
- Information Analysis
- Inquiry Processing

FACILITY

- Editing/Validation
- Data Input
- Lexicography
- Computer Systems
- Publication Preparation
- Data Base Management

GPO

- Photocomposition
- Abstract/Index Journal
  Publication (RIE)
- Subscr. Management

EDRS

- Microfilming
- Dissemination
  Microfiche
  Hard Copy

CIJE PUBLISHER

- Commercial Publishing
  CIJE Journal
  Other Spinoffs

REFERENCE & RESOURCE CENTERS

- Local User Dissemination
  Computer Searches
  Reference Services

The major Clearinghouse functions not covered by this Manual can be briefly elaborated as follows:

- Providing Reference and Retrieval Services

  Reference assistance and retrieval services are provided to individual users. This may include literature searches/bibliographies (computer or manual), identification of sought-after documents, referrals to sources of information (such as summaries, state-of-the-art studies, or even other data bases, such as NTIS, NASA, DDC, University Microfilms, etc.). Information regarding the ERIC system and how to utilize it is also provided.

- Developing Information Analysis Products

  Information analysis products include research reviews, papers summarizing or synthesizing given topics, bibliographies (annotated and unannotated), position papers, directories, guides to a field or to the literature of a field, etc. The particular products developed by a given Clearinghouse will depend on such factors as the user group served, priorities established by Clearinghouse staff, Clearinghouse Advisory Board input, Central ERIC and NIE requests and initiations, etc.

- Conducting Workshops and Presentations

  Clearinghouses conduct workshops and make presentations on how to use the ERIC System and the products generated by the system (including both basic reference tools such as RIE and CIJE, and information analysis products). Education of the user community in order to extend and improve system use is a constant activity).

- Developing and Maintaining Linkages With User Groups

  A number of communication links, procedures, and products have been established by Clearinghouses to provide information to users and to obtain materials from them, e.g., newsletters, articles, regular journal columns, conference participation (including exhibit booths), etc. Professional associations and the various intermediate information transfer units are very helpful in fulfilling these Clearinghouse functions.

Each Clearinghouse is identified by a two-character alphabetic prefix and all documents and journal articles processed by the ERIC Clearinghouses for Research in Education (RIE) or Current Index to Journals in Education (CIJE) are assigned Clearinghouse Accession Numbers that begin with these prefixes. A complete list of all prefixes used to date (and therefore of all Clearinghouses that have existed) appears below:

PREFIX		
AA	ERIC Facility Contractor	(series discontinued with March 1973 RIE)
AC	Adult Education	(merged into CE in 1973)
AL	Linguistics	(merged into FL in 1971)
CE	Career Education	Current
CG	Counseling and Personnel Services	Current
CS	Reading and Communication Skills	Current
EA	Educational Management	Current
EC	Handicapped and Gifted Children	Current
EF	Educational Facilities	(merged into EA in 1970)
EM	Educational Media and Technology	(merged into IR in 1974)
FL	Languages and Linguistics	Current
HE	Higher Education	Current
IR	Information Resources	Current
JC	Junior Colleges	Current
LI	Library and Information Sciences	(merged into IR in 1974)
PS	Early Childhood Education	Current
RC	Rural Education and Small Schools	Current
RE	Reading	(merged into CS in 1972)
SE	Science, Mathematics, and Environmental Education	Current
SO	Social Science/Social Studies	Current
SP	Teacher Education	Current
TE	Teaching of English	(merged into CS in 1972)
TM	Tests, Measurement, and Evaluation	Current
UD	Disadvantaged	Current
VT	Vocational and Technical Education	(merged into CE in 1973)

The following is a complete list of all currently operating ERIC Clearinghouses sequenced by their name. A brief indication of the scope of interest of each Clearinghouse is also included. Appendix G provides complete mailing addresses, telephone numbers, and staff names and titles for all Clearinghouses. Appendix C provides a detailed guide to the subject matter and topical areas covered by each Clearinghouse.

ERIC Clearinghouse in *Career Education*
Northern Illinois University
DeKalb, Illinois 60115

Career education, formal and informal at all levels, encompassing attitudes, self-knowledge, decision-making skills, general and occupational knowledge, and specific vocational and occupational skills; adult and continuing education, formal and informal, relating to occupational, family, leisure, citizen, organizational, and retirement roles; vocational and technical education, including new sub-professional fields, industrial arts, and vocational rehabilitation for the handicapped.

ERIC Clearinghouse on *Counseling and Personnel Services*
University of Michigan
Ann Arbor, Michigan 48104

Preparation, practice, and supervision of counselors at all educational levels and in all settings; theoretical development of counseling and guidance, use and results of personnel procedures such as testing, interviewing, disseminating, and analyzing such information; group work and case work, nature of pupil, student, and adult characteristics, personnel workers and their relation to career planning, family consultations, and student orientation activities.

ERIC Clearinghouse on the *Disadvantaged*
Columbia University, Teachers College
New York, New York 10027

Effects of disadvantaged experiences and environments, from birth onward; academic, intellectual, and social performance of disadvantaged children and youth from grade 3 through college entrance; programs and practices which provide learning experiences designed to compensate for special problems of disadvantaged; issues, programs, and practices related to economic and ethnic discrimination, segregation, desegregation, and integration in education; issues, programs, and materials related to redressing the curriculum imbalance in the treatment of ethnic minority groups.

ERIC Clearinghouse on *Early Childhood Education*
University of Illinois
Urbana, Illinois 61801

Prenatal factors, parental behavior; the physical, psychological, social, educational, and cultural development of children from birth through the primary grades; educational theory, research, and practice related to the development of young children.

ERIC Clearinghouse on *Educational Management*
University of Oregon
Eugene, Oregon 97403

Leadership, management, and structure of public and private educational organizations; practice and theory of administration, preservice and inservice preparation of administrators, tasks, and processes of administration; methods and varieties of organization, organizational change, and social context of the organization.

Sites, buildings, and equipment for education, planning, financing, constructing, renovating, equipping, maintaining, operating, insuring, utilizing, and evaluating educational facilities.

ERIC Clearinghouse on *Handicapped and Gifted Children*
The Council for Exceptional Children
Reston, Va. 22091

Aurally handicapped, visually handicapped, mentally handicapped, physically handicapped, emotionally disturbed, speech handicapped, learning disabilities, and the gifted, behavioral, psychomotor, and communication disorders, administration of special education services; preparation and continuing education of professional and paraprofessional personnel; preschool learning and development of the exceptional; general studies on creativity.

ERIC Clearinghouse on *Higher Education*
George Washington University
Washington, D. C. 20036

Various subjects relating to college and university students, college and university conditions and problems, college and university programs. Curricular and instructional problems and programs, faculty, institutional research, Federal programs, professional education (medical, law, etc.), graduate education, university extension programs, teaching-learning, planning, governance, finance, evaluation, interinstitutional arrangements, and management of higher educational institutions.

ERIC Clearinghouse on *Information Resources*
Stanford University
Stanford, California 94305

Management, operation, and use of libraries; the technology to improve their operation and the education, training, and professional activities of librarians and information specialists. Educational techniques involved in microteaching, systems analysis, and programmed instruction employing audiovisual teaching aids and technology, such as television, radio, computers, and films. Technology in society adaptable to education, including cable television, communication satellites, microforms, and public television.

ERIC Clearinghouse for *Junior Colleges*
University of California
Los Angeles, California 90024

Development, administration, and evaluation of public and private community junior colleges. Junior college students, staff, curricula, programs, libraries, and community services.

ERIC Clearinghouse on *Languages and Linguistics*
Center for Applied Linguistics
Arlington, Virginia 22209
Telephone: (703) 528-4312

Languages and linguistics. Instructional methodology, psychology of language learning, cultural and intercultural content, application of linguistics, curricular problems and developments, teacher training and qualifications, language sciences, psycho-linguistics, theoretical and applied linguistics, language pedagogy, bilingualism, and commonly and uncommonly taught languages including English for speakers of other languages.

ERIC Clearinghouse for *Reading and Communication Skills*
National Council of Teachers of English
Urbana, Illinois 61801

Reading, English, and communication skills, preschool through college. Educational research and development in reading, writing, speaking, and listening. Identification, diagnosis, and remediation of reading problems. Speech communication—forensics, mass communication, interpersonal and small group interaction, interpretation, rhetorical and communication theory, instruction development, speech sciences, and theater. Preparation of instructional staff and related personnel in these areas.

All aspects of reading behavior with emphasis on physiology, psychology, sociology, and teaching. Instructional materials, curricula, tests and measurement, preparation of reading teachers and specialists, and methodology at all levels. Role of libraries and other agencies in fostering and guiding reading. Diagnostic and remedial services in school and clinical settings.

ERIC Clearinghouse on *Rural Education and Small Schools*
New Mexico State University
Las Cruces, New Mexico 88003

Education of Indian Americans, Mexican Americans, Spanish Americans, and migratory farm workers and their children; outdoor education; economic, cultural, social, or other factors related to educational programs in rural areas and small schools; disadvantaged of rural and small school populations.

ERIC Clearinghouse on *Science, Mathematics, and Environmental Education*
Ohio State University
Columbus, Ohio 43210

All levels of science, mathematics, and environmental education; development of curriculum and instructional materials; media applications, impact of interest, intelligence, values, and concept development upon learning; preservice and inservice teacher education and supervision.

ERIC Clearinghouse for *Social Studies/Social Science Education*
Boulder, Colorado 80302

All levels of social studies and social science; all activities relating to teachers; content of disciplines; applications of learning theory, curriculum theory, child development theory, and instructional theory; research and development programs; special needs of student groups; education as a social science; social studies/social science and the community.

ERIC Clearinghouse on *Teacher Education*
American Association of Colleges for Teacher Education
Washington, D. C. 20036

School personnel at all levels; all issues from selection through preservice and inservice preparation and training to retirement; curricula; educational theory and philosophy; general education not specifically covered by Educational Management Clearinghouse; Title XI NDEA Institutes not covered by subject specialty in other ERIC Clearinghouses; all aspects of physical education.

ERIC Clearinghouse on *Tests, Measurement, and Evaluation*
Educational Testing Service
Princeton, New Jersey 08540

Tests and other measurement devices; evaluation procedures and techniques; application of tests, measurement, or evaluation in educational projects or programs.

1.2.3 Commercial Contractors

1. ERIC Processing and Reference Facility

ERIC Processing and Reference Facility
Operations Research, Inc., Information Systems Div.
Bethesda, Maryland

The ERIC Processing and Reference Facility is a centralized information processing facility serving all components of the ERIC network, i.e., Central ERIC, the decentralized Clearinghouses, ERIC Document Reproduction Service, CIJE Contractor. It is under the policy direction of Central ERIC. Services provided include: receiving and dispatch, document control (screening, duplicate checking, assignment, storage, special distributions, accessioning), document analysis (cataloging, indexing, abstracting, editorial review), authority list maintenance (including lexicographic analysis), data preparation (preparing machine-readable data), computer processing, system and file maintenance, data base management, programming, reference responses, etc. The Facility prepares and delivers a variety of products and publications from the ERIC data base. These include the monthly abstract journal Research in Education (RIE) and its Semiannual and Annual Indexes; quarterly editions of the ERIC Thesaurus and Source Directory; annual editions of the rotated and hierarchical versions of the Thesaurus; an annual Contract/Grant Number Index; a quarterly Report/Project Number Index; a quarterly cumulative Clearinghouse Number/ED Number Cross-Reference List; a Title Index to the entire data base; regular updates to the ERIC Processing Manual, the ERIC Directory, and the System Documentation; and numerous other listings, compilations, and indexes. Staff of the Facility serve ERIC in an advisory or consultant capacity, manage and participate in tape user seminars, and perform analyses of the data base. A heavy emphasis is placed by the Facility on scheduling, statistical reporting, and cost accounting (including unit cost reports), for purposes of management control.

The current ERIC Facility contractor is Operations Research, Incorporated. The major Facility functions covered by this Manual can be listed as follows:

- Acquisitions and Assignment of Documents

  The ERIC Facility performs an acquisitions function principally aimed at obtaining documents pertinent to the ERIC mission from Government agencies and from foreign and international organizations. For these sources of documents, the Clearinghouses are directed to work through the Facility. Documents obtained from these efforts, as well as documents originated or otherwise obtained directly by the National Institute of Education, are assigned by the Facility to the appropriate Clearinghouse in accordance with the Clearinghouse statements of scope. The Facility does not exercise an Evaluation/Selection function. A list of formal acquisition arrangements established by the Facility is provided in Figure 2-13.

- Handling and Shipping

  Both the Facility and the Clearinghouses follow essentially the same practices for the physical handling, wrapping, mailing, shipping, etc. of documents and other communications (See Section 4).

- Input Screening

  Each shipment of documents and resumes from the Clearinghouses is checked against the accompanying log sheet to verify completeness of the shipment. The documents are then checked to ensure the attachment of policy statements and reproduction releases (when required) and that the document can be microfilmed. The documents/resumes are then forwarded for editing of the Clearinghouse processing work. Descriptor Justification Forms (DJF's), and documents requiring new Source Codes, are sent to Lexicographic Analysis for review prior to editing. Documents received for complete processing by the Facility are processed in the same manner as in the Clearinghouses.

- Document Processing ("Full Processing")

  The ERIC Facility receives accessioned but otherwise unprocessed documents from certain selected Clearinghouses (specified by Central ERIC) and performs all subsequent processing (i.e., cataloging, indexing, abstracting, editing, etc.) on these documents.

- Editing

  Documents and completed resume forms, for which initial processing has been accomplished by either the Clearinghouses or the Facility, are received by the editors and checked to ensure completeness and correctness of all entries and compliance with the provisions of the ERIC Processing Manual.

(After editing, all data are processed into machine-readable form for subsequent computer processing to produce RIE and other products.)

- Vocabulary Maintenance

  The ERIC Facility reviews all new index terms (Descriptors) recommended by the Clearinghouses, approves or denies the term, and refines the Scope Note (definition) and cross-reference structure, if necessary. Similarly, all suggestions for change of existing terminology are reviewed by the Facility Lexicographer for feasibility, advisability, impact, and compliance with the Rules for Thesaurus Preparation (See Section 8.3.3). Substantive changes, involving the deletion or merging of terms, are submitted to a nationwide Vocabulary Review Group for approval.

The major Facility functions not covered by this Manual can be briefly elaborated as follows:

- Distribution of ERIC Documents

  e.g., complimentary distribution of RIE, Directory of ERIC Microfiche Standing Order Customers, distribution of ERIC-related handout and exhibit materials for conference-type activities, etc.

- Reference Responses

  General information about the ERIC System and ordering information for specific sought-after documents is provided to a wide variety of users who have directed their inquiries to NIE, OE, Central ERIC, GPO, LC, etc. Appropriate referrals are also made.

- Computer Searches

  Computer searches of the ERIC Data Base (RIE and CIJE) are made for Central ERIC and for those ERIC Clearinghouses either not otherwise having access to such searches, or having unusually heavy demands on their service.

- Data Entry

  All screened and edited ERIC document data are reduced to machine-readable form for subsequent computer processing.

- Computer Processing

  Data reduced to machine-readable form are used to update the ERIC magnetic tape and direct access computerized file. Publications and indexes are generated from these files via a series of computer programs (documented in the ERIC Systems and Programming Documentation).

- ERICTAPES/ERICTOOLS Projects

  The ERIC Facility Contractor is authorized by Central ERIC to make the ERIC data base, and various internal ERIC reference publications, e.g., Title Index, available for sale to the public via a self-sustaining program not requiring Government subsidy.

2. Current Index to Journals in Education (CIJE) Contractor

Macmillan Information
Division of Macmillan Publishing Company, Inc.
New York, New York

The current CIJE Contractor is Macmillan Information. CIJE was created by Macmillan in 1969 as a joint venture with ERIC. In addition to this index to journal literature in the field of education, Macmillan Information has utilized the ERIC Data Base, as available on magnetic tape, for the preparation of a variety of publications (See Section 1.3), and has, in effect, become the major commercial "hardback" publisher exploiting the ERIC Data Base.

The major CIJE Contractor functions covered by this Manual are the following;

- Selection, Acquisition, and Assignment of Journals to be Covered by CIJE

  Journals to be covered, either comprehensively or selectively, are recommended by Clearinghouses, but decided upon by the CIJE Contractor. Whenever possible, journals are assigned for processing to Clearinghouses on the basis of their scope of interest. Journals that cannot be assigned (e.g., too general) are processed by the CIJE Contractor.

- Input Screening

  Clearinghouses ship completed resumes for journal articles to the CIJE Contractor, where they are checked against the accompanying log sheet to verify completeness of the shipment.

- Editing

  All completed journal article resumes, whether done by Clearinghouses or in-house, are edited to ensure accuracy, completeness, and compliance with this Manual.

The major CIJE Contractor functions not covered by this Manual can be listed as follows:

- Data Entry
- Computer Processing
- CIJE (And Other ERIC-Related Products) Production, Marketing, Sales, Distribution

3. ERIC Document Reproduction Service (EDRS)

ERIC Document Reproduction Service (EDRS)
Computer Microfilm International, Corporation (CMIC)
Arlington, Virginia

The current EDRS Contractor is Computer Microfilm International, Corporation (CMIC). EDRS is the document supply and distribution component of the ERIC network. All non-copyrighted documents (and any others for which reproduction permission has been obtained) announced in Research in Education, are forwarded to EDRS, where they are microfilmed and converted into microfiche (4" x 6" flat sheets of microfilm) according to Federal and National standards.

Interested users may obtain copies of ERIC documents from EDRS in either microfiche (at 24x reduction*) or paper copy form (at 100% original size). Orders are accepted on either an on-demand or subscription basis. Subscribers may order the entire microfiche collection (monthly this amounts to about 950 titles contained on about 1,400 microfiche) or subsets of the entire collection (such as all the titles input by a particular Clearinghouse). There are currently over 500 organizations that subscribe to the entire ERIC collection on a continuing basis. These are made up of Federal agencies, universities and colleges, and state and local education agencies, school systems, professional associations, non-profit groups, etc. There are over thirty subscriptions in foreign countries. Individual users consist of teachers, faculty, students, researchers, planners, administrators, counselors, therapists, and numerous other members of the educational community.

---

*20x reduction was employed prior to 1972.

Each document announced in Research in Education carries with it its EDRS price (or alternate source of availability). Individual on-demand microfiche are sold at a price of $0.75 per title as long as the document fits on five cards or less (i.e., is 479 pages or less); the price increases $0.15 for each additional card (i.e., 96 page increment or fraction thereof) required. Individual on-demand paper copies are sold on an unevenly graduated price scale beginning at $1.50 for 1-25 pages and rising for each additional 25 page increment (or fraction thereof). See price tables on page 172 for full information. Microfiche may be purchased on a standing order basis at a bargain price (encouraging subscriptions) that works out to less than $0.10 per microfiche, or about $2,000 a year for around 17,000 microfiche.

None of the functions performed by EDRS are covered by this Manual.

1.2.4 Government Printing Office

U. S. Government Printing Office
Washington, D. C.

The Government Printing Office receives each month from the ERIC Facility a magnetic tape containing the contents of an issue of RIE. Using the Linotron high-speed photocomposition device, GPO composes camera-ready made-up pages for the issue, and prints and binds sufficient copies to handle subscription, complimentary distribution, and on-demand order requirements. All subscriptions to RIE, and all initial distributions to these paid subscribers, are handled by GPO. (Complimentary distribution is handled by the ERIC Facility.) On-demand orders for single copies or cumulative indexes are handled by GPO as long as the supply lasts. Out-of-print RIE issues are eventually re-printed in hardback form by the CIJE Contractor.

None of the functions performed by the GPO are covered in this Manual.

1.3 MAJOR ERIC PRODUCTS

A large number of information products result from the effort of the various members of the ERIC network. The major products are described below, in entries designed for the reader as yet unfamiliar with ERIC. A larger list of available products (including the major ones) appears in Figure 1-4, together with information concerning frequency, publisher, price, etc. Each publisher can provide additional informational literature elaborating on his particular products. A complete bibliography of all ERIC Information Analysis Products, 1967-1972 has been published by Macmillan and appears as item 11 in Figure 1-4. This publication also includes a bibliography of materials written about ERIC.

1.3.1 Research in Education (RIE)

RIE is a monthly (12 issues per year) abstract journal that announces reports and documents dealing with all aspects of education, i.e., research reports, program descriptions, instructional materials. RIE is made up of a resume section of document abstracts, and an index section consisting of separate subject, author, and institutional source indexes. Annual and semiannual indexes are available. Each issue announces approximately 1,200 items.

RIE is directed at the entire educational community, e.g., school administrators, teachers, supervisors, school board members, education researchers, students, librarians, professional educators, etc.

RIE is available from the U. S. Government Printing Office, Superintendent of Documents, Washington, D. C. 20402. The current annual subscription price for the journal in the U. S. is $38 per year, exclusive of cumulative indexes. For additional details, see Figure 1-4.

1.3.2 Current Index to Journals in Education (CIJE)

CIJE is a monthly (12 issues per year) index journal that announces journal articles from approximately 700 education and education-related journals. CIJE is made up of a main entry section, consisting of bibliographic information and up to 50 word annotations for each article, an index section, consisting of separate subject and author indexes, and a journal contents section arranged by journal title and showing the articles accessioned from each journal issue. Annual and semiannual cumulations are available (cumulating both announcements and indexes). Each issue announces approximately 1,500 items).

Like RIE, CIJE is directed at the entire educational community.

CIJE is available from Macmillan Information (for current address, see Appendix G). The amount and subscription price for the journal in the U. S. is $44 per year, exclusive of cumulations. For additional details, see Figure 1-4.

1.3.3 Thesaurus of ERIC Descriptors

The Thesaurus of ERIC Descriptors contains the basic vocabulary used by the ERIC system for the indexing of documents and journal articles. It contains approximately 5,000 Main Terms and 2,500 Synonyms cross-referenced to the Main Terms. Scope Notes (definitions) or parenthetical qualifiers are provided for all non-obvious terms. Hierarchical and other relationships among terms are indicated by the standard "Narrower Term". "Broader Term". "Related Term" notation.

The Thesaurus is maintained and corrected by the ERIC Facility, largely on the basis of inputs from the ERIC Clearinghouses. New terms and changes are made on a monthly basis and are sent to all ERIC Clearinghouses and announced in the back of RIE. A quarterly "Working Copy" is produced by the Facility for the use of the Clearinghouse indexers. The Thesaurus is periodically (approximately annually) published for public sale by Macmillan Information.

1.3.4 ERICTAPES

ERICTAPES are magnetic tape copies of the files of bibliographic data assembled by the ERIC System. A number of different files, in a variety of formats, are offered for sale by the ERIC Facility Contractor. The most popular files are the sequential Master Files containing the records announced in Research in Education and in Current Index to Journals in Education, however the inverted subject index files and the Thesaurus file have also been widely disseminated.

The files are sold on 9-track tape reels (600-, 1200-, or 2400-foot, as appropriate), at packing densities of either 800 or 1600 BPI. The tapes are unlabeled and in IBM 360 Operating System (OS) format in EBCDIC code. Both "Upper Case Only" and "Upper and Lower Case" character sets are offered.

Detailed discussions of the various files, formats and ordering options, along with price lists, can be obtained from the ERIC Facility Contractor.

	PRODUCT	FREQUENCY	PUBLISHER	ISSUE PRICE		ANNUAL SUBSCRIPTION		NOTES
				DOMESTIC	FOREIGN	DOMESTIC	FOREIGN	
1.	CAREER EDUCATION, AN ERIC BIBLIOGRAPHY	---	Macmillan Information	$ 9.95*				
2.	CLEARINGHOUSE NO. TO ED NO. CROSS-REFERENCE LIST	Quarterly	Operations Research, Inc.	15.00	$ 18.00	$ 50.00	$ 60.00	
3.	CONTRACT/GRANT NUMBER INDEX	Annually	Operations Research, Inc.	10.00	12.00			
4.	CURRENT INDEX TO JOURNALS IN EDUCATION (CIJE)							
	Monthly Issues	Monthly	Macmillan Information			44.00	Same, plus postage	Cumulations include both resumes and indexes.
	Monthly, with Annual Cumulation		"			77.00		
	Monthly, Semiannual and Annual Cumulations		"			83.00		
	Semiannual Cumulation		"			15.00		
	Annual Cumulation		"			33.00		
	Semiannual and Annual Cumulations		"			45.00		
5.	DESCRIPTOR AND IDENTIFIER USAGE REPORT	Annually	Macmillan Information	40.00**				
6.	EARLY CHILDHOOD EDUCATION, AN ERIC BIBLIOGRAPHY	---	Macmillan Information	9.95*				
7.	EDUCATIONAL DOCUMENTS ABSTRACTS							
	1972		Macmillan Information	35.00**				All 5 volumes available in library binding for $150.00, plus $5.00 for postage and handling.
	1971		"	35.00**				
	1970		"	35.00**				
	1969		"	35.00**				
	1968		"	35.00**				
8.	EDUCATIONAL DOCUMENTS INDEX							
	1972 (1 volume)	---	Macmillan Information	25.00**				All 4 volumes available in library binding for $75.00.
	1970-1971 (1 volume)		"	25.00**				
	1966-1969 (2 volumes)		"	34.50**				
9.	EDUCATIONAL DOCUMENTS INDEX - INSTITUTIONS	---	Macmillan Information	15.00**				Library binding.
10.	EDUCATIONAL FINANCE, AN ERIC BIBLIOGRAPHY	---	Macmillan Information	8.95*				[illegible].95 Paperbound.
11.	ERIC INFORMATION ANALYSIS PRODUCTS, 1967-1972	---	Macmillan Information	14.95*				5-year cumulation.
12.	ERIC PROCESSING MANUAL	---	ERIC Document Reproduction Service (EDRS)					Price to be established.
13.	ERICTAPES							
	RIE Linear Files	Monthly Quarterly & Annually	Operations Research, Inc.	300.-525.	340.-580.	150.-600.	160.-780	Prices dependent on technical specifications, options, and frequency of updates (monthly, quarterly, annually available). Index (inverted files) and Thesaurus file also available. Write for brochure providing full details.
	CIJE Linear Files		"	75.-150.	85.-160.	125.-600	135.-720	
14.	HARD COPY DOCUMENTS (ON DEMAND)	On Demand	ERIC Document Reproduction Service (EDRS)	3.29	Same, plus postage			$3.29 for each 100 page increment, or portion thereof.
15.	INSTITUTIONAL SOURCES							
	Alphabetic Directory	Quarterly	Operations Research, Inc.	15.00	18.00	50.00	61.00	
	Statistics and Postings	Semiannually	"	35.00	41.00	60.00	72.00	
16.	LIBRARY AND INFORMATION SCIENCES, AN ERIC BIBLIOGRAPHY	---	Macmillan Information	9.95*				

*Plus $0.50 for postage and handling
**Plus $1.00 for postage and handling
***Leasco Systems & Research Corp. became a division of Operations Research, Inc., effective January 1, 1974.

FIGURE 1-4
ERIC PRODUCTS - SUMMARY LIST

	PRODUCT	FREQUENCY	PUBLISHER	ISSUE PRICE DOMESTIC	ISSUE PRICE FOREIGN	ANNUAL SUBSCRIPTION DOMESTIC	ANNUAL SUBSCRIPTION FOREIGN	NOTES
17.	MICROFICHE							
	Monthly Subscriptions	Monthly	ERIC Document Reproduction Service (EDRS)	$165.00	Same plus postage	$2,000.00	Same, plus postage	Volume dependent 1973 cost was $1,890.44
	On Demand Titles	---	"	0.65	Same, plus postage			
	Back Collections							
	1966 and 1967	---	"	393.91				
	1968	---	"	1,186.06				
	1969	---	"	1,415.01				
	1970	---	"	1,440.73				
	1971	---	"	1,681.47				
	1972	---	"	1,760.68				
	1073	---	"	1,890.4[illegible]				
	1966 - 1973 (Entire Collection)	---	"	9,768.[illegible]				
18.	READING: AN ERIC BIBLIOGRAPHY, 1970-1972	---	Macmillan Information	9.95				
19.	RECENT RESEARCH IN READING: A BIBLIOGRAPHY, 1966-1969	---	Macmillan Information	14.95				
20.	REPORT/PROJECT NUMBER INDEX	Quarterly	Operations Research, Inc.	15.00	$17.00	50.00	$57.00	
21.	RESEARCH IN EDUCATION (RIE)							
	Monthly issues	Monthly	Government Printing Office (GPO)	3.25	Same. Plus Postage	38.00	47.50	Out-of-Print Through 1971.
	Semiannual Index		"	3.75				Varies in price, Jan.-June 1973 was $5.30
	Annual Index							Varies in price each year. Volumes for 1971, 1970, and 1967 are out-of-print.
	1972		"	10.50				
	1971 (Out-of-Print)		"	7.00				
	1970 (Out-of-Print)		"	6.00				
	1969		"	6.25				
	1968		"	8.25				
	1966-1967 (Out-of-Print)		"	3.25				
	Back issues of RIE (Resumes)							
	1972		Macmillan Information	35.00				Reprints by commercial publishers. See "Educational Documents Abstracts"
	1971		"	35.00				
	1970		"	35.00				
	1969		"	35.00				
	1968		"	35.00				
	1966-1967		National Standards Assoc.	24.50				
	Back indexes of RIE (Subject/Author)							
	1972		Macmillan Information	25.00				Reprints by commercial publishers. See "Educational Documents Index".
	1970-1971		"	25.00				
	1966-1969 (2 volumes)		"	34.50				
	1966-1967		National Standards Assoc.	3.25				
22.	SOCIAL STUDIES AND SOCIAL SCIENCE EDUCATION, AN ERIC BIBLIOGRAPHY		Macmillan Information	9.95				
23.	THESAURUS OF ERIC DESCRIPTORS	Annually	Macmillan Information	8.95				$6.95 Paperbound.
24.	TITLE INDEX							
	Full Cumulation	Annually	Operations Research, Inc	50.00	60.00			
	With Quarterly Supplements	Quarterly	"			75.00	90.00	

Plus $0.50 for Postage and Handling
Plus $1.00 for Postage and Handling

EDRS:
P. O. Drawer O
Bethesda, Maryland 20014

GPO:
Superintendent of Documents
U. S. Government Printing Office
Washington, D. C. 20402

Macmillan
866 Third Avenue
New York, New York 20022
(212) 935-5374

National Standards Association
1321 14th Street, N. W.
Washington, D. C. 20005

Operations Research, Inc.
4833 Rugby Avenue
Bethesda, Maryland 20014
(301) 656-9723

FIGURE 1-4
Sheet 2

1.3.5 Document Reproductions

Microfiche

A microfiche is a sheet of microfilm approximately 4" x 6", on which up to 98 pages of text are reproduced (at 24x reduction). Only the data on the header strip of a microfiche (containing accession number, title, author, etc.) are eye-legible; a special enlarging reader is necessary to read the page images.

Documents are announced in RIE at one of three possible "Levels". Level I documents are available in both microfiche and hard copy; Level II documents are available only in microfiche; Level III documents are not available at all from EDRS, but an alternate source of availability is cited in the RIE announcement. Approximately 18% of the items announced in RIE are Level III; all others, or 82%, may be obtained in microfiche form from EDRS. Journal articles announced in CIJE are not available in microfiche form due to publisher copyright restrictions.

A single title that will fit on five microfiche or less (i.e., 479 pages) costs $0.75. The price increases at a rate of $0.15 for each additional microfiche required (i.e., 96 page increment or less). Standing orders to obtain the entire ERIC collection on microfiche are available from EDRS.

Hard Copy (HC)

Hard Copy refers to a paper reproduction, (usually at 100% original size) of an original document. All Level I documents announced in RIE (about 75% of the announcements) are available from EDRS in Hard Copy.

Hard copy reproductions are sold on an unevenly graduated scale dependent on size. The price starts at $1.50 for a document of 1-25 pages. See Table on page 172 for complete EDRS price information.

1.3.6 Reference Tools (Providing Access to the Data Base)

A wide variety of reference tools providing access to the ERIC Data Base are available. All significant tools are listed in Figure 1-4, together with information as to frequency, publisher, price, etc.

As examples, the following two major tools are described.

Title Index

The Title Index to RIE accessions (ED number accessions) is produced in the form of an annual total cumulation, supplemented by quarterly cumulations for the calendar year in progress. It is a major reference tool with particular application to duplicate checking and the identification of inquiries where title is the major (if not only) data element provided.

The format includes both pagination and date of publication, as additional discriminators helpful in the case of identical titles. The pagination also permits the user to mentally calculate the EDRS printed copy price.

The Title Index is available from the ERIC Facility Contractor at $50 for the latest cumulation and $75 for the cumulation plus a year's supplements.

ERIC Descriptor and Identifier Usage Report

This publication is a dual-purpose tool for both manual and computer searches. It adds to each Descriptor and Identifier used in either RIE or CIJE the total number of accessions indexed by each term (usage statistics) and the actual accession numbers (postings) of these documents. The statistics give the batch searcher the number of hits he will get on a term, and suggest to him whether he should narrow or broaden his search. The postings provide the manual searcher with access to the actual document/article accession numbers indexed by the term. Note should be made that this reference tool contains data for all subject indexing done by the ERIC System, including those "minor" terms which have not appeared in the RIE and CIJE published indexes.

This reference tool is available from Macmillan Information and will be revised annually.

SECTION OUTLINE

PAGE

2.1 INTRODUCTION 29

2.2 ACQUISITIONS METHODS AND TECHNIQUES 29

2.2.1 General 29

2.2.2 Types of Arrangements 30

1. Unsolicited Receipts 30
2. Automatic Distribution 31

Distribution Lists 31
Exchanges 31

3. General Solicitation (e.g., Conference Papers) 34
4. Requests for Specific Titles 35
5. Purchase 35

Blanket Orders 36
Specific Orders 36

2.2.3 Form Letters 40

2.2.4 Acquisitions Tools 40

2.3 CENTRAL ERIC ROLE IN ACQUISITIONS 42

2.3.1 Policy Setting, Guidance, Coordination, Monitoring 42

2.3.2 Acquisitions Responsibilities (NIE, OE, States) 43

2.3.3 PRIORITY Documents 43

2.4 CLEARINGHOUSE ACQUISITIONS EFFORTS 44

2.4.1 General Mandate 44

2.4.2 Sources of Documents 45

2.4.3 Acquisitions Tools 45

PAGE

2.4.4 Clearinghouse Operations (Typical) 49

2.4.5 Copyright and Reproduction Releases 56

2.4.6 Reporting to Central ERIC 58

2.5 ERIC FACILITY ACQUISITIONS PROGRAM 58

2.5.1 Purpose and Scope 58

2.5.2 ERIC Facility Acquisitions Arrangements (EFAA's) 60

2.5.3 Screening and Obtaining Specific Documents 63

2.5.4 Reporting to Central ERIC 71

FIGURES

PAGE

2-1 Acquisitions Arrangement - Documentation for Local Files (Example) 32

2-2 Acquisitions Arrangement - Letter of Understanding (Example) 33

2-3A-C Form Letter Solicitations (Examples) 37-39

2-4 Notice Identifying a Document to be Accorded PRIORITY Handling 44

2-5 Typical Clearinghouse Acquisitions Operation - Flow Chart 47-48

2-6A-B Document Request Letters (Examples) 50-51

2-7 Document Purchase Order (Example) 52

2-8 "On-Order" Record Card (Example) 52

2-9A-B Acknowledgments to Document Contributors (Examples) 53

2-10 Letter Transmitting Out-of-Scope Documents from One Clearinghouse to Another (Example) 55

2-11 Reproduction Release Form (Example) 57

2-12 ERIC Facility Acquisitions Program - General Description 59

2-13 ERIC Facility Acquisitions Arrangements - List 61-62

2-14A-B Clearinghouse Requests to Facility for Government-Contractor Document and Government Document (Examples) 65

2-15 GPO Order Form 66

2-16 NTIS Order Form 67-68

2-17A-B Letters Responding to Outside Inquiries (and Taking Opportunity to Request Documents) 69-70

2-18 Scope Overlap Sticker 71

2-19 ERIC Facility Acquisitions Summary Report (By Source) 73-74

2-20 ERIC Facility Acquisitions Operations - Flow Chart 75

ACQUISITIONS

Summary of Significant Rules

1. Clearinghouses have basic responsibility for acquiring those documents that deal with their subject areas. Clearinghouse efforts are supplemented by those of Central ERIC (NIE and OE reports) and the ERIC Facility (Federal and Inter-Governmental documents)

2. When in doubt, acquire. An acquired document may be selected or rejected, but an unacquired document never receives the benefit of an informed evaluation.

3. Arrangements that cause documents to be received automatically, whenever they first become available, are generally more productive and more economical than on-demand after-the-fact efforts; in addition, they result in more timely receipt of documents.

4. Exchange arrangements must be monitored to ensure their effectiveness (are the documents bargained for being received?) and their fairness.

5. Each Clearinghouse is responsible for establishing basic control over the documents that it has on-order.

2.1 INTRODUCTION

Productive use of the ERIC Data Base is dependent upon the quality and comprehensiveness of the input to it. The acquisitions function provides the raw materials for all the functions that follow: selection, processing, announcement, retrieval, dissemination. Acquisitions is the critical first step in building the data base.

In the ERIC system, all components play a role in acquisitions. Central ERIC has basic responsibility for the reports prepared under contract or grant to the National Institute of Education (NIE) and the U. S. Office of Education (OE). The ERIC Facility has responsibility for the Federal area outside of NIE and OE, for certain inter-governmental arrangements, and for general coordination to avoid duplication of effort. The CIJE Contractor has responsibility for all new "core" and education-related journals published, and for ensuring comprehensive coverage of existing journals (Section 9.2). The Clearinghouses are responsible for establishing document acquisitions programs covering their respective subject areas comprehensively.

This section covers the various techniques for acquiring documents, the responsibilities of each of the network areas referred to above, and the ways that balance and coordination are achieved between elements of the system.

2.2 ACQUISITIONS METHODS AND TECHNIQUES

2.2.1 General

Among the various technical processing tasks involved in controlling a literature and building a data base, acquisitions is unusually dependent for its success on resourcefulness, inventiveness, and industry, and less dependent on the exact following of written policies and procedural rules (such as presented here). This is because there is not one single best way to bring documents in; the opportunities present themselves in a multitude of guises. They must be seized rapidly and with whatever accommodations and adjustments the situation calls for. The acquisitions librarian or specialist must be stubborn, problem-solving, far-sighted, creative, and whatever else is necessary, to ensure a steady inflow of potentially valuable documents.

The acquisitions process always contains an element of selection in that not everything can be obtained, priorities must be set, decisions must be made even as to what to go after. Nevertheless, a cardinal rule of the acquisitions process is "When in doubt, get it!" Once obtained, a document may be selected or rejected, but if it is never obtained in the first place, ERIC personnel never get a chance to exercise any selective or critical judgment with respect to it.

2.2.2 Types of Arrangements

1. Unsolicited Receipts

An active acquisitions program is characterized by continuous personal and correspondence efforts to keep ERIC's document needs before potential contributors. Brochures, such as "How to Use ERIC" and "ERIC - A Profile", and the journal Research in Education itself, also contain general information concerning ERIC's desire for educational literature and instructions as to where contributions should be sent. These and other efforts result in the receipt of small but significant numbers of documents which were never specifically solicited. Such receipts occur at all levels of the network, including EDRS, and must be routed to the appropriate processing center. Central ERIC and EDRS generally route such documents to the ERIC Facility for assignment to the appropriate Clearinghouse. The Clearinghouses transfer them among themselves, if necessary, as appropriate.

This is obviously one of the easiest ways to get documents, if not one of the steadiest and most reliable. Follow-ups with contributors of this type can sometimes result in continuing arrangements.

Types of Arrangements

2. Automatic Distribution

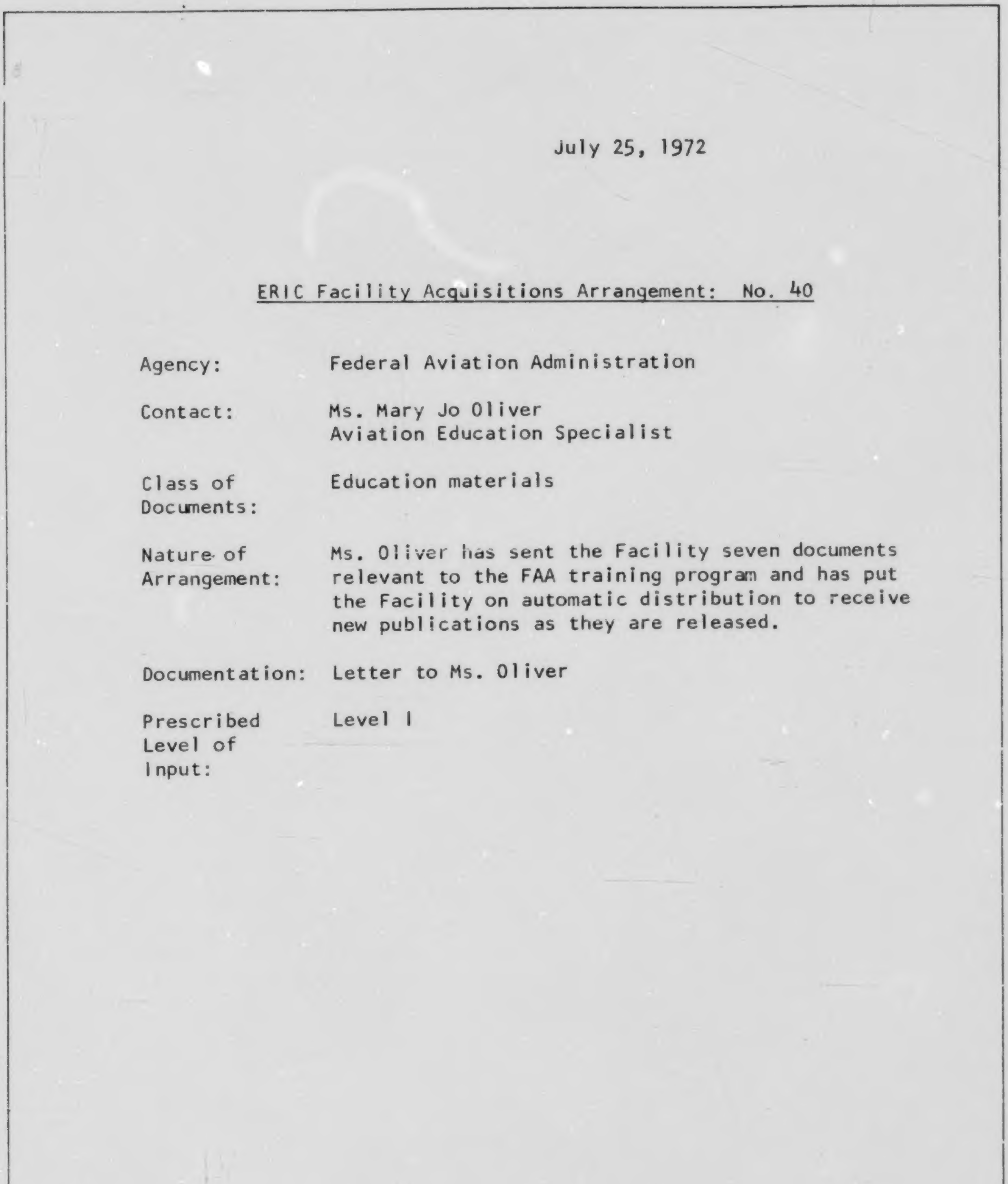
Distribution Lists

The most productive kind of acquisitions arrangement is one where the requesting organization is placed on an organization's mailing list (formal or informal) and thereby gets all (or classes) of its publications "automatically" as issued. A successful request for a specific title nets one document; a successful request to be put on a distribution list may net 100 documents over time.

At the time arrangements are consummated, they should always be documented for local records (See example in Figure 2-1) and reinforced by a letter of understanding sent to the contributor (See example in Figure 2-2). As personnel change, it is often useful to staff on both sides of such an arrangements to have documentation supporting an agreement. A number of such arrangements, operating successfully, will form a solid foundation for any active acquisitions program. Once established, such arrangements may continue for years with little or nothing required to maintain them. It is good practice, however, to periodically check acquisition records to make certain each contributor is continuing to send reports. Follow-ups should be made in cases where receipts have either stopped or seriously diminished. If any specific titles are known which have not been received, they can be requested during the follow-up.

Exchanges

Exchanges are a variation of automatic distribution. Most of ERIC's solicitations are for free copies of publications, (with ERIC offering only the advantages of announcement, indexing, inclusion in the machine-readable data base, reduction to microfiche, and constant availability). Sometimes, however, quid pro quo



July 25, 1972

ERIC Facility Acquisitions Arrangement: No. 40

Agency: Federal Aviation Administration

Contact: Ms. Mary Jo Oliver
Aviation Education Specialist

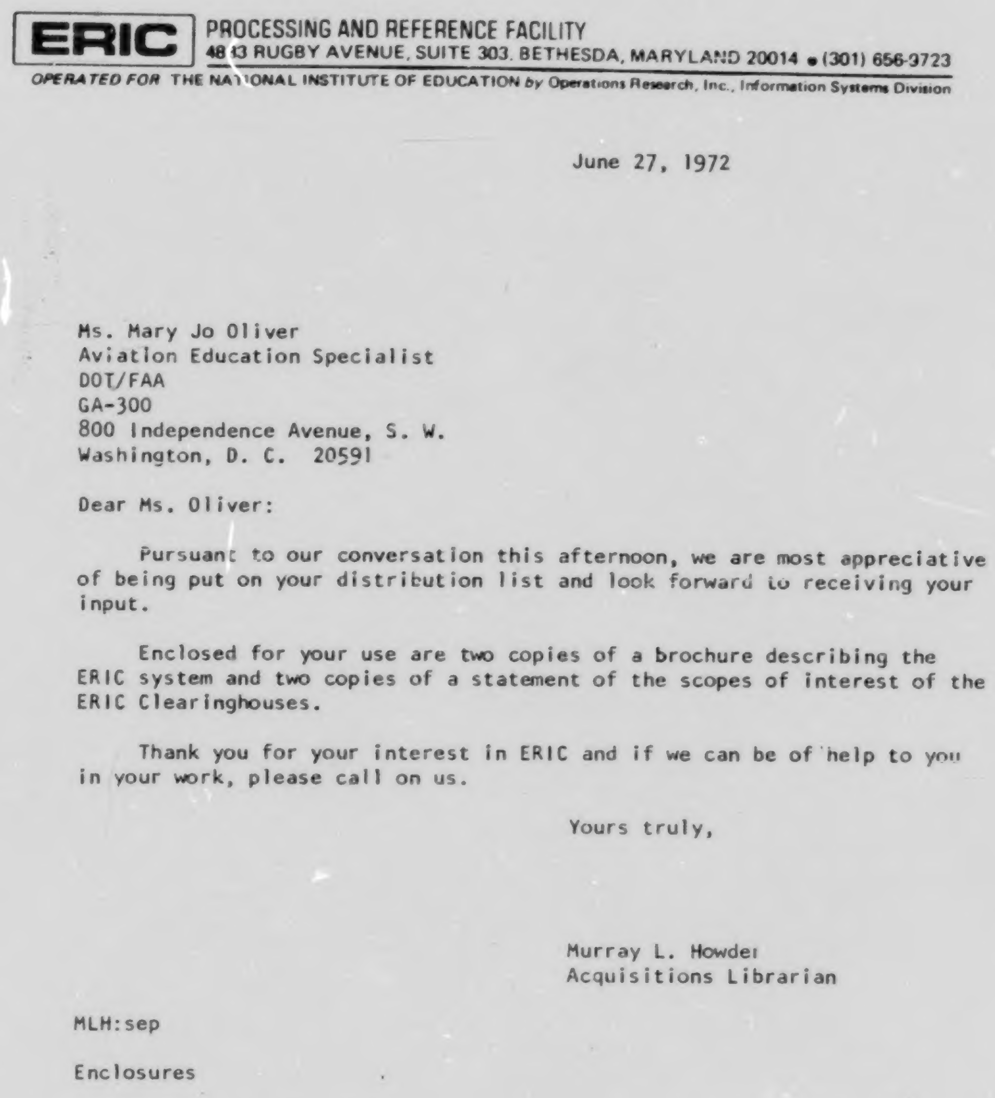
Class of Documents: Education materials

Nature of Arrangement: Ms. Oliver has sent the Facility seven documents relevant to the FAA training program and has put the Facility on automatic distribution to receive new publications as they are released.

Documentation: Letter to Ms. Oliver

Prescribed Level of Input: Level I

FIGURE 2-1
ACQUISITIONS ARRANGEMENT
DOCUMENTATION FOR LOCAL FILES
(EXAMPLE)



ERIC PROCESSING AND REFERENCE FACILITY
4833 RUGBY AVENUE, SUITE 303. BETHESDA, MARYLAND 20014 • (301) 656-3723
OPERATED FOR THE NATIONAL INSTITUTE OF EDUCATION *by* Operations Research, Inc., Information Systems Division

June 27, 1972

Ms. Mary Jo Oliver
Aviation Education Specialist
DOT/FAA
GA-300
800 Independence Avenue, S. W.
Washington, D. C. 20591

Dear Ms. Oliver:

Pursuant to our conversation this afternoon, we are most appreciative of being put on your distribution list and look forward to receiving your input.

Enclosed for your use are two copies of a brochure describing the ERIC system and two copies of a statement of the scopes of interest of the ERIC Clearinghouses.

Thank you for your interest in ERIC and if we can be of help to you in your work, please call on us.

Yours truly,

Murray L. Howder
Acquisitions Librarian

MLH:sep

Enclosures

FIGURE 2-2
ACQUISITIONS ARRANGEMENT
LETTER OF UNDERSTANDING
(EXAMPLE)

exchanges are the only way to acquire publications from certain organizations. This is typically true of foreign ministries of education and international organizations, but may also occasionally apply to domestic professional organizations. If the arrangement is established by Central ERIC or the ERIC Facility, complimentary subscriptions to RIE may be offered. The Clearinghouses may offer their own newsletters, bibliographies, and other publications. Exchanges should be regularly and carefully monitored to ensure that ERIC is receiving the desired publications and that what is being received is a fair exchange for the ERIC material being sent.

3. General Solicitation (e.g., Conference Papers)

The solicitations contained in RIE and the various informational brochures are essentially undirected. They are not addressed to particular institutions, nor do they request specific documents. There are many opportunities during the year, however, to direct similar general solicitations to specific organizations and activities. In such situations, the solicitation is not typically for specific documents, but rather for everything that the activity produces; the purpose is not to try to set up a permanent distribution list arrangement, but rather to try to take advantage of a temporary and often transient opportunity.

Professional meetings, conferences, symposia, seminars, workshops, colloquiums, etc., are good examples of such opportunities. ERIC acquisitions staff who learn of relevant activities of this type (particularly those geographically close by) may participate at various levels, e.g., (1) write for proceedings and papers; (2) attend the activity; (3) participate in the program, (4) establish a booth; etc. Whatever level of participation is chosen, the acquisitions person involved should take every opportunity to publicize ERIC and make its document needs known, e.g., distribute business cards, hand out brochures and materials describing the ERIC system and the need for contributor input, request preprints from chairmen or copies of papers from individual speakers, etc.

Persons representing ERIC at such activities are strongly urged to remember to solicit for the system in general and not just for their own element of the system.

4. Requests for Specific Titles

Specific titles of documents relevant to the field of education come to the attention of acquisitions personnel by a variety of channels: (1) requests from clients, the public, or other staff members; (2) news releases, newsletters, and other rapid announcement sources; (3) conference announcements and programs; (4) conventional media regularly read or scanned, e.g., reviews, professional and association journals, newspapers/radio/TV; (5) library acquisitions tools, e.g., Publishers Weekly, other abstract journals (e.g., Government Reports Announcements), acquisition lists of certain libraries and information centers, bibliographies in received documents, etc.

The acquisition of specific titles usually involves an individual written request directed at the author, sponsor, publisher, or other source. Sometimes a modified form letter (citing the specific title desired) can be used; sometimes a telephone call can be employed. Sometimes a request for a single title will lead to an offer of other related publications or an offer to send future publications as issued. For the most part, however, requests for specific titles are a one-for-one proposition, i.e., one successful request nets one title.

Records should be kept of each title so requested, in order to avoid duplicate requests (irritating to the source and wasteful of effort), and in order to be able to respond knowledgeably to all inquiries about documents. As materials are received and included in the system, this outstanding request or on-order file must gradually be purged to keep its size manageable. (See also Section 4.2.3).

5. Purchase

While most documents can be acquired for ERIC free of charge or via exchange, or as review copies, some few must be purchased. Prime examples of valid documents that must be purchased are those available only from GPO or NTIS. Others are available from a wide variety of commercial or non-profit publishers (or authors) who have either copyrighted the document in question or otherwise restricted its reproduction in order to be able to sell it to defray publishing expenses.

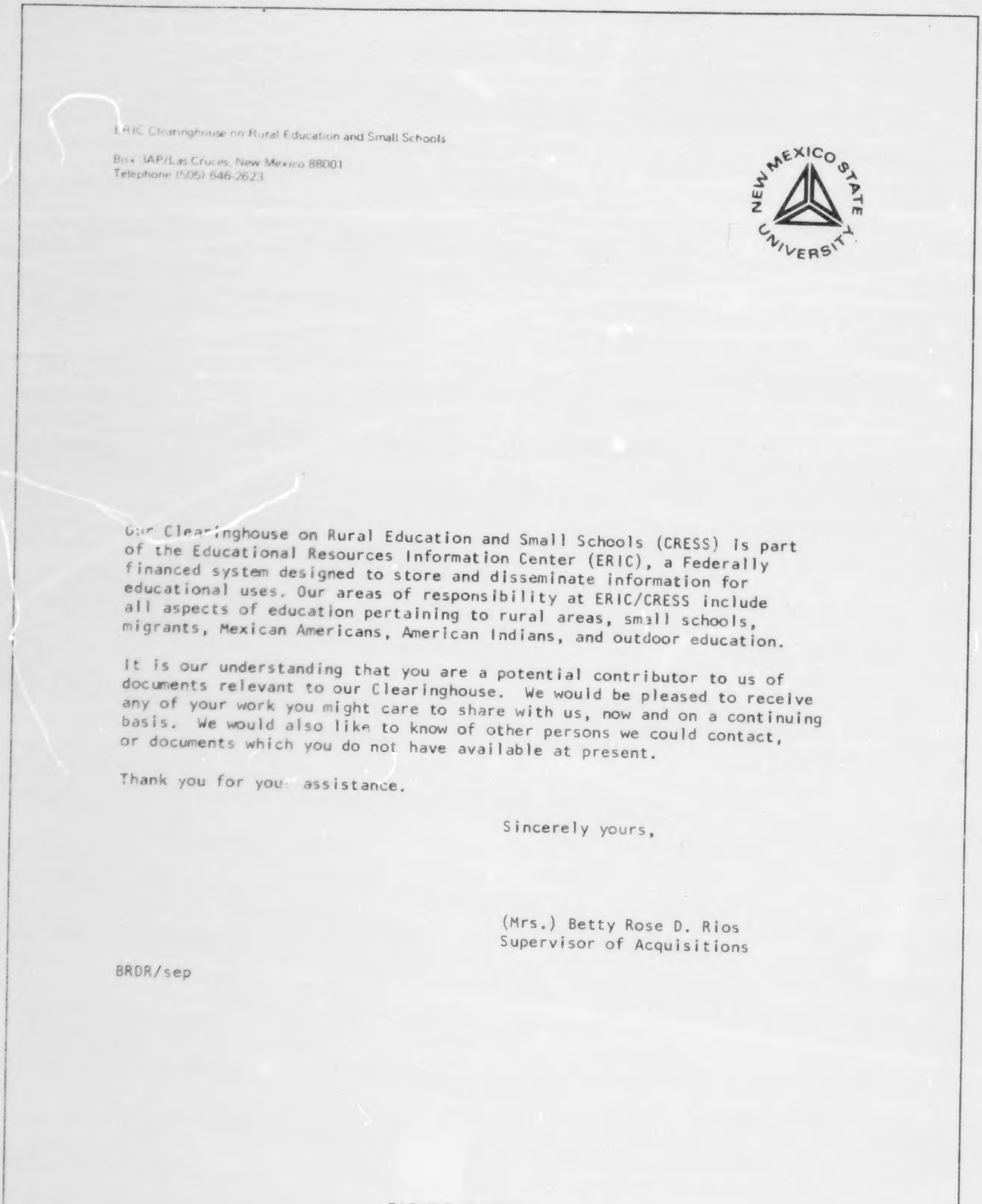
Purchases should be made when necessary to obtain a valuable and useful title, however, they should always be scrutinized carefully and made deliberately, with full awareness of the selection criteria enumerated in Section 3. If reproduction releases (for Level I or Level II input) cannot be obtained, the document must be entered at Level III. It is not advantageous to the RIE journal, the microfiche collection, or the system in general, to have an excessive number of non-reproducible Level III announcements, where the user must be directed outside the ERIC system for satisfaction. Level III input into RIE has held fairly steady over the last few years at about 18%. This seems to be an acceptable level and Clearinghouses should keep this statistic in mind when evaluating their own volume of Level III input. (Please note that GPO documents should enter the system at Level I (See Section 5.3.6)).

Blanket Orders

Blanket orders are standing orders or, in effect, subscriptions for all the publications (or relevant classes of publications) produced by a given source. Blanket orders are only possible in those instances where the source (or a jobber) offers the service. Blanket orders often have the advantage of reducing the time to acquire, cutting paperwork, lowering overall costs, and most importantly, assuring comprehensive acquisitions. An example of a blanket order would be the ERIC Facility's arrangement with UNIPUB (the U. S. agent for all UNESCO publications).

Specific Orders

The same guidelines and observations that apply to the section above on "Requests for Specific Titles", apply equally here. The only difference is that the necessity of paying requires completion of a formal "Purchase Order", or its equivalent, by the ordering organization.



ERIC Clearinghouse on Rural Education and Small Schools

Box 3AP/Las Cruces, New Mexico 88001
Telephone (505) 646-2623

NEW MEXICO STATE UNIVERSITY

Our Clearinghouse on Rural Education and Small Schools (CRESS) is part of the Educational Resources Information Center (ERIC), a Federally financed system designed to store and disseminate information for educational uses. Our areas of responsibility at ERIC/CRESS include all aspects of education pertaining to rural areas, small schools, migrants, Mexican Americans, American Indians, and outdoor education.

It is our understanding that you are a potential contributor to us of documents relevant to our Clearinghouse. We would be pleased to receive any of your work you might care to share with us, now and on a continuing basis. We would also like to know of other persons we could contact, or documents which you do not have available at present.

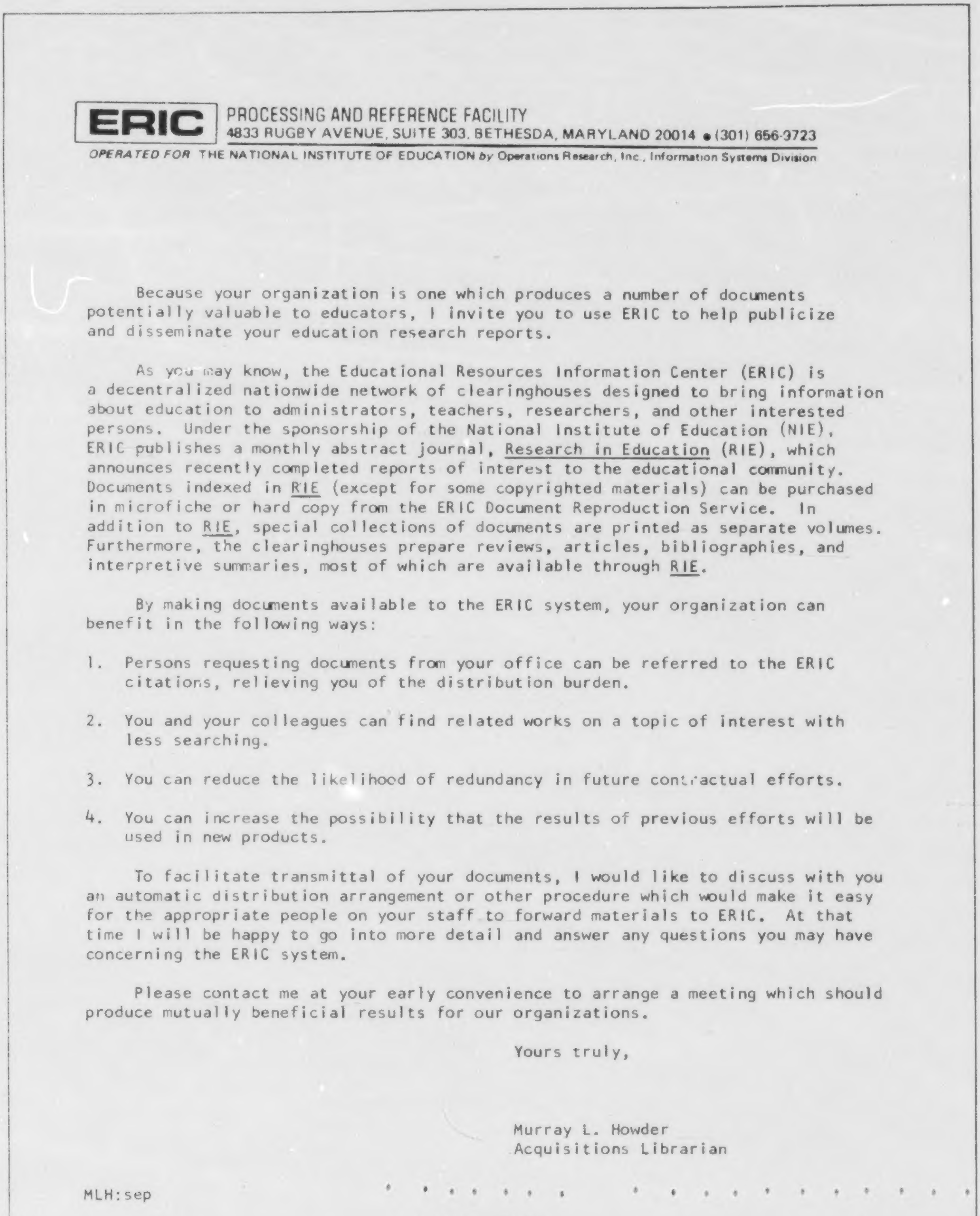
Thank you for your assistance.

Sincerely yours,

(Mrs.) Betty Rose D. Rios
Supervisor of Acquisitions

BRDR/sep

FIGURE 2-3C
FORM LETTER SOLICITATION
(EXAMPLE)



ERIC PROCESSING AND REFERENCE FACILITY
4833 RUGBY AVENUE, SUITE 303, BETHESDA, MARYLAND 20014 • (301) 656-9723
OPERATED FOR THE NATIONAL INSTITUTE OF EDUCATION *by* Operations Research, Inc., Information Systems Division

Because your organization is one which produces a number of documents potentially valuable to educators, I invite you to use ERIC to help publicize and disseminate your education research reports.

As you may know, the Educational Resources Information Center (ERIC) is a decentralized nationwide network of clearinghouses designed to bring information about education to administrators, teachers, researchers, and other interested persons. Under the sponsorship of the National Institute of Education (NIE), ERIC publishes a monthly abstract journal, Research in Education (RIE), which announces recently completed reports of interest to the educational community. Documents indexed in RIE (except for some copyrighted materials) can be purchased in microfiche or hard copy from the ERIC Document Reproduction Service. In addition to RIE, special collections of documents are printed as separate volumes. Furthermore, the clearinghouses prepare reviews, articles, bibliographies, and interpretive summaries, most of which are available through RIE.

By making documents available to the ERIC system, your organization can benefit in the following ways:

1. Persons requesting documents from your office can be referred to the ERIC citations, relieving you of the distribution burden.
2. You and your colleagues can find related works on a topic of interest with less searching.
3. You can reduce the likelihood of redundancy in future contractual efforts.
4. You can increase the possibility that the results of previous efforts will be used in new products.

To facilitate transmittal of your documents, I would like to discuss with you an automatic distribution arrangement or other procedure which would make it easy for the appropriate people on your staff to forward materials to ERIC. At that time I will be happy to go into more detail and answer any questions you may have concerning the ERIC system.

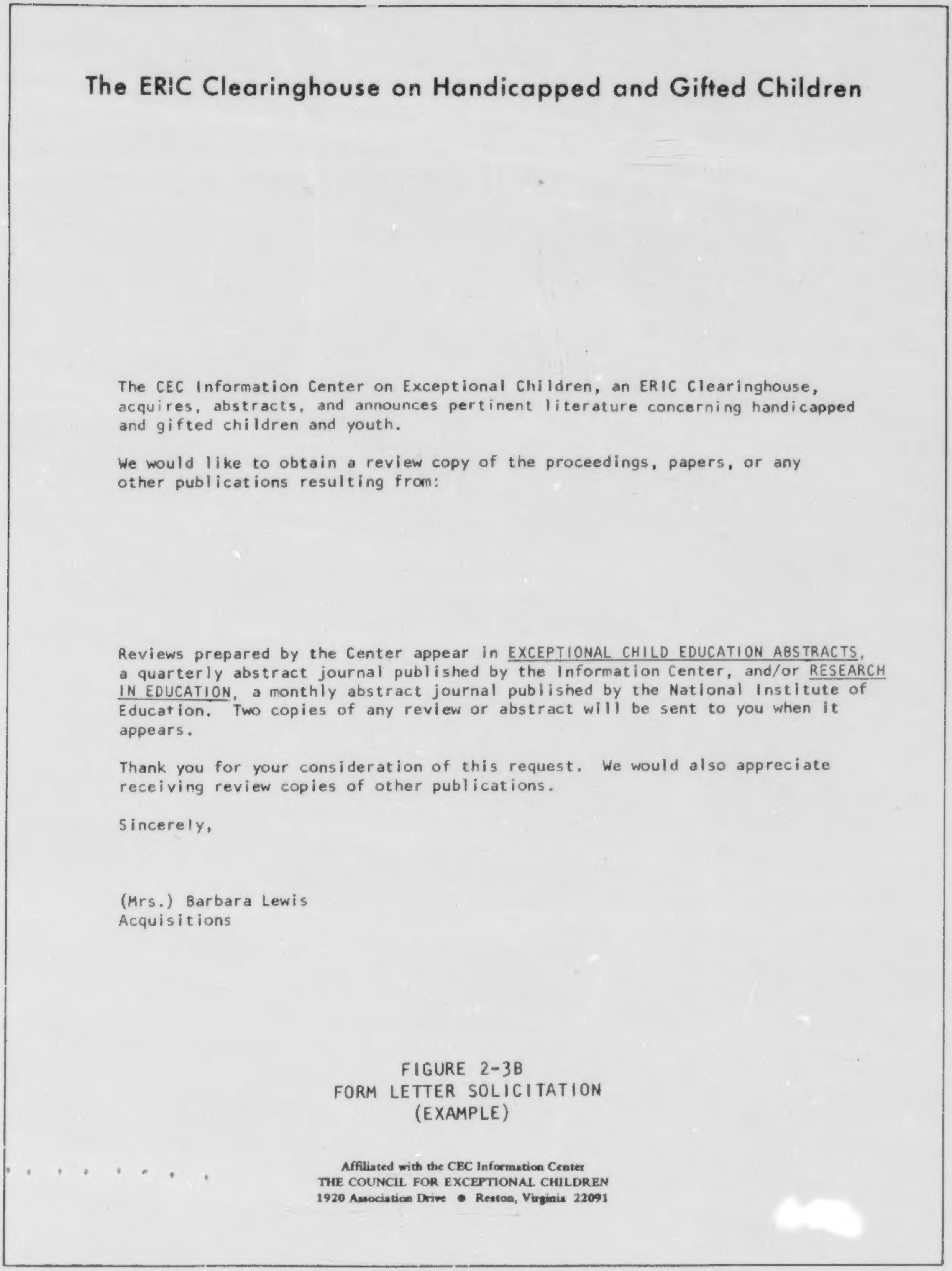
Please contact me at your early convenience to arrange a meeting which should produce mutually beneficial results for our organizations.

Yours truly,

Murray L. Howder
Acquisitions Librarian

MLH:sep

FIGURE 2-3A
FORM LETTER SOLICITATION
(EXAMPLE)



The ERIC Clearinghouse on Handicapped and Gifted Children

The CEC Information Center on Exceptional Children, an ERIC Clearinghouse, acquires, abstracts, and announces pertinent literature concerning handicapped and gifted children and youth.

We would like to obtain a review copy of the proceedings, papers, or any other publications resulting from:

Reviews prepared by the Center appear in EXCEPTIONAL CHILD EDUCATION ABSTRACTS, a quarterly abstract journal published by the Information Center, and/or RESEARCH IN EDUCATION, a monthly abstract journal published by the National Institute of Education. Two copies of any review or abstract will be sent to you when it appears.

Thank you for your consideration of this request. We would also appreciate receiving review copies of other publications.

Sincerely,

(Mrs.) Barbara Lewis
Acquisitions

FIGURE 2-3B
FORM LETTER SOLICITATION
(EXAMPLE)

Affiliated with the CEC Information Center
THE COUNCIL FOR EXCEPTIONAL CHILDREN
1920 Association Drive • Reston, Virginia 22091

2.2.3 Form Letters

Because of the large number of contacts required by the acquisitions process, it is often advantageous to rely on form letters, or at least standard language which has been developed to make an optimum presentation of the requester's position, the advantages of giving a document to the ERIC system, etc. With good printing and a personalized inside address and salutation, a form letter can appear quite "customized" and can achieve the desired result. There will, of course, always be instances in which original letters must be written. Nevertheless, form letters definitely have a time-saving role to play in acquisitions work, particularly in the initial contact phase. Examples of some form letters, used within the ERIC system, that have proved effective are shown in Figures 2-3A, 2-3B, and 2-3C.

2.2.4 Acquisitions Tools

A wide variety of reference tools are useful in acquisitions work. Most prominent and numerous are the tools to be scanned in order to learn of promising new reports and documents, e.g., newsletters of professional associations, professional journals, catalogs and flyers of publishers, other abstract journals, etc. Also of use, however, are tools that inform of upcoming conferences and meetings, directories that list likely source organizations, research-in-progress compilations that pinpoint future document producers, etc. An active acquisitions organization typically builds up an extensive reference collection and also ensures the continued regular receipt of numerous serial publications that are regularly scanned.

The following are examples of some general acquisitions tools of various types in use at the ERIC Facility. A different such list could be prepared for each specialized area of the field of education. The list is by no means intended to be comprehensive, but merely illustrative:

CALENDARS OF MEETINGS:

Calendar of Meetings of National and
  Regional Education Associations
Educational Meetings Calendar

PROFESSIONAL JOURNALS:

Library Journal
Today's Education
Government Publications Review

NEWSLETTERS AND RAPID ANNOUNCEMENT SERVICES:

Chronicle of Higher Education
Education Daily
HEW Newsletter
Education USA

DIRECTORIES:

Federal Telephone Directory
Congressional Staff Directory
Washington, D. C. Telephone Directory
Education Directory
National Referral Center: Information Resources

GENERAL REFERENCE:

U. S. Government Organization Manual
Government Publications and Their Use
Books in Print

ABSTRACT JOURNALS:

Government Reports Announcements
Selected RAND Abstracts

RESEARCH-IN-PROGRESS COMPILATIONS:

Research Grants Index (NIH)
Current Project Information
Smithsonian Science Information Exchange searches
Research, Demonstration, and Evaluation Studies (OCD)

CATALOGS AND FLYERS:

GPO Monthly Catalog
A.I.D. Memory Documents
SRS Publications

DOCUMENTS WITH RICH BIBLIOGRAPHIES AND/OR FOOTNOTE INFORMATION

Annual High School Debate Topic Bibliography
Report on Higher Education

2.3 CENTRAL ERIC ROLE IN ACQUISITIONS

2.3.1 Policy Setting, Guidance, Coordination, Monitoring

As with all phases of the ERIC program, Central ERIC sets the basic policies to be followed by the acquisitions function. Central ERIC determines what kinds of documents are suitable for RIE and has formalized these decisions in the selection criteria stated in Section 3. Central ERIC approves the scope of interest of each Clearinghouse, (See Appendix C), thereby establishing those areas of the field of education for which each has responsibility. The format and frequency of the basic duplicate checking tools (e.g., Title Index, Acquisitions Data Report) used in acquisitions, are dictated by Central ERIC. The statistical and narrative reports required of each element of the network are detailed by Central ERIC (See the Administrative Procedures Manual). Central ERIC monitors all network activities, including acquisitions, as to the adequacy of performance and compliance with contract conditions.

Each network component has a designated staff member at Central ERIC with whom to discuss problems. This person generally undertakes the regular site visits to the Clearinghouses and gets involved in resolving a large variety of problems, many of which are acquisitions-related, e.g., copyright or "limited copyright" questions, document reproduction (e.g., offsize documents, illegibility, etc.), the detection of duplicates, the disposition of documents received from the ERIC Facility, etc.

Contact between Central ERIC and the ERIC Facility is particularly frequent insofar as NIE and OE documents flow on a daily basis from the former to the latter. There are frequent requests for information concerning the receipt or status of particular documents. In addition to actual documents, many notices of publications, conferences, and sources of educational materials come to the attention of Central ERIC staff and are passed on to the Facility.

2.3.2 Acquisitions Responsibilities (NIE, OE, States)

Central ERIC has reserved to itself the acquisitions of certain classes of documents. It coordinates the acquisition of State documents through State Liaison officers. It has negotiated arrangements for receipt of publications from some foreign institutions and ministries of education and several international organizations (sometimes offering complimentary distribution of RIE in exchange). Central ERIC acquires the formal publications and contractor reports of both the Office of Education and the National Institute of Education; this includes reports from the various Government-funded educational research centers and educational laboratories. In nearly all cases where acquisitions is handled centrally (by either Central ERIC or the ERIC Facility) one of the important procedural objectives is to avoid multiple solicitations, from various ERIC network components, all converging on (and harrassing) one Government agency or foreign organization. All reports and documents acquired by Central ERIC, whether actively or on an unsolicited basis, are forwarded to the ERIC Facility for assignment to appropriate ERIC Clearinghouses.

2.3.3 PRIORITY Documents

Central ERIC designates certain important documents, particularly OE and NIE reports, as "PRIORITY Documents". A special identifying notice is affixed to these documents (See Figure 2-4). Questions or problems concerning reproducibility or copyright are resolved before sending them to the Facility for Clearinghouse assignment, so that PRIORITY documents can proceed as rapidly as possible through the system.

There are only two classes of document handling--"ROUTINE" and "PRIORITY". "PRIORITY" status indicates to the Clearinghouse that processing must take place as quickly as necessary to ensure that the document appears in the earliest possible issue of RIE (this can be determined from the Master Schedule). If the deadline of an issue is close, this can sometimes require virtually 24-hour turnaround. The handling of PRIORITY documents is described in detail in Section 4.

> PRIORITY
>
> Please EXPEDITE the processing of the attached report and return it to the ERIC Facility for announcement in the ____________ issue of RIE.
>
> EFF-39 (1/74)

FIGURE 2-4
NOTICE IDENTIFYING A DOCUMENT TO BE ACCORDED PRIORITY HANDLING

2.4 CLEARINGHOUSE ACQUISITIONS EFFORTS

2.4.1 General Mandate

The primary responsibility in ERIC for acquisitions and the bringing in of documents to the system has always been and continues to be with the ERIC Clearinghouses. Each Clearinghouse is responsible for ensuring a steady flow into RIE of high-quality documents in its special area of education.

In order to qualify for RIE, documents must: (1) Fall within the field of education, broadly defined; (2) Meet the physical (i.e., size and legibility), content, and quality criteria set forth in Section 3: Selection. Documents which fail to satisfy the basic requirements are not to be input to RIE, but may be kept for local collections, if desired. If a document falls outside the scope of interest of the Clearinghouse considering it, it should be routed to the appropriate Clearinghouse for evaluation rather than discarded.

2.4.2 Sources of Documents

The Clearinghouses are responsible for acquiring reports, publications, studies, papers, and other documents issued by all organizations except those reserved to Central ERIC (See Section 2.3) and to the ERIC Facility (See Section 2.5).

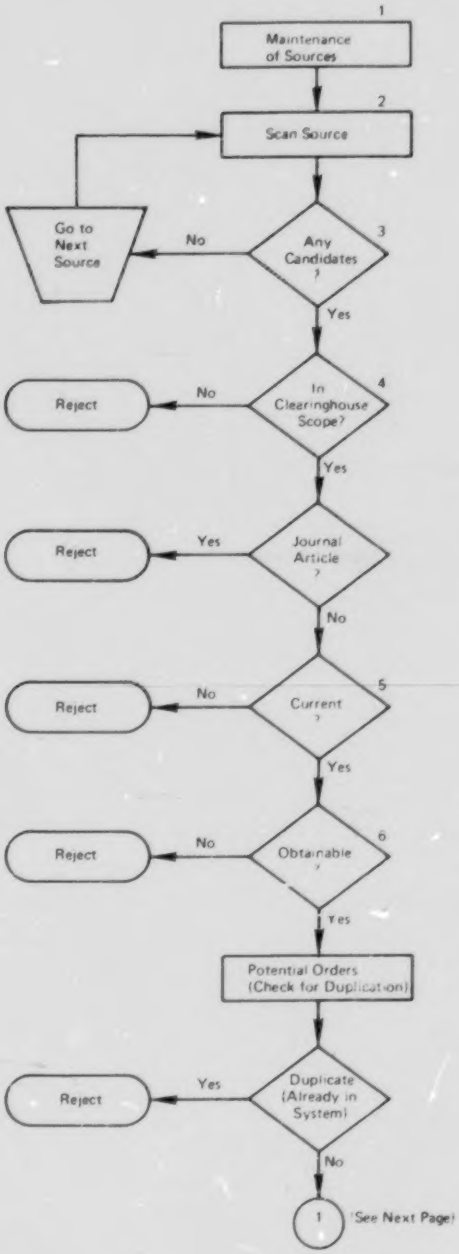
Some documents arrive unsolicited, and others are received from the ERIC Facility. For most acquisitions, however, the Clearinghouses must rely on contacts with appropriate professional societies, academic institutions, people known to be working in the field, specific State or Local officials responsible for programs relevant to the Clearinghouse subject area, foundations sponsoring education projects, publishers, institutes, speech-makers, information centers, etc. Conferences can be a lucrative source of documents, and Clearinghouses should be alert to all conferences in their subject area. In addition Clearinghouses may coordinate with other elements of the network in covering all papers and products of a large or general conference in their geographic area, later forwarding those outside their own particular subject scope to the Facility for assignment elsewhere in the network.

2.4.3 Acquisitions Tools

The Clearinghouses must utilize a number of reference tools and publications to identify specific titles and potential sources of documents. Journals, newsletters, advertisements, book reviews, and news items should be scanned regularly for relevant new titles and names of people or institutions engaged in projects, studies, or grant awards which could produce reports appropriate for the particular Clearinghouse section of RIE. Standard bibliographies, such as the Monthly Checklist of State Publications, can also be searched for suitable titles. Catalogs or lists from charitable and social service agencies often produce good titles for acquisitions. Acquisition lists from information centers and special libraries are excellent sources of new titles, and sometimes provide full information for ordering either from the center or the publisher. Staff and client recommendations, as well as references contained in Clearinghouse information analysis products, can furnish valuable leads to new documents.

In addition to the periodical and serial literature that is scanned for titles, every Clearinghouse should build and maintain a good permanent reference collection for acquisitions. In addition to those cited in Section 2.2.4, the following basic works are recommended:

- Directory of Educational Information Centers. Washington, D. C.: U. S. Department of Health, Education, and Welfare, 1969.
- Directory of Educational Information Resources. Falls Church, Virginia: Systems Development Corporation, 1971.
- Encyclopedia of Associations. 6th ed. Detroit, Michigan: Gale Research Co., 1970.
- The Foundation Directory. 4th ed. New York: Columbia University Press, 1971
- CEDaR Catalog of Selected Educational Development and Research Programs, Projects and Products. Denver, Colorado: Information Office for Network of R&D Centers and Educational Laboratories, 1972.
- Leaders in Education. 4th ed. New York and London: Jaques Cattel Press/R. R. Bowker Company, 1971.
- Literary Market Place; The Business Directory of American Book Publishing. New York: R. R. Bowker.
- Research Grants Index. Washington, D. C.: U. S. Government Printing Office.
- Standard Directory of Newsletters. New York: Oxbridge, 1972.
- Library Acquisitions; A Classified Bibliographic Guide to the Literature and Reference Tools, by Wynar, Bohdan S. 2nd ed. Littleton, Colorado: Libraries Unlimited, 1971.



NOTES

1. Journals, Newsletters, Publication Announcements, Catalogs, Bibliographies, References in Other Documents, etc.

2. Check References, Bibliographies, News Sections, "Professional Reading", Reviews, etc.

3. Papers, Reports, Documents, Studies, Surveys, Conference Proceedings, Project Descriptions, Monographs, Manuals, Speeches, etc. (Emphasis on Literature not Formally Published)

4. Insofar as Can Be Determined from Available Information.

5. Each Clearinghouse will Define "Current" Slightly Differently. "Classic" Items May Be Included Even if Old.

6. Source Known? Price within Range? Reproducibility Unlikely? Foreign or Non-English Language Item? Difficult to Acquire?

7. Acknowledgments or Thank-you Notes Are Optional.

FIGURE 2-5
TYPICAL CLEARINGHOUSE ACQUISITIONS OPERATION
(FLOW CHART)

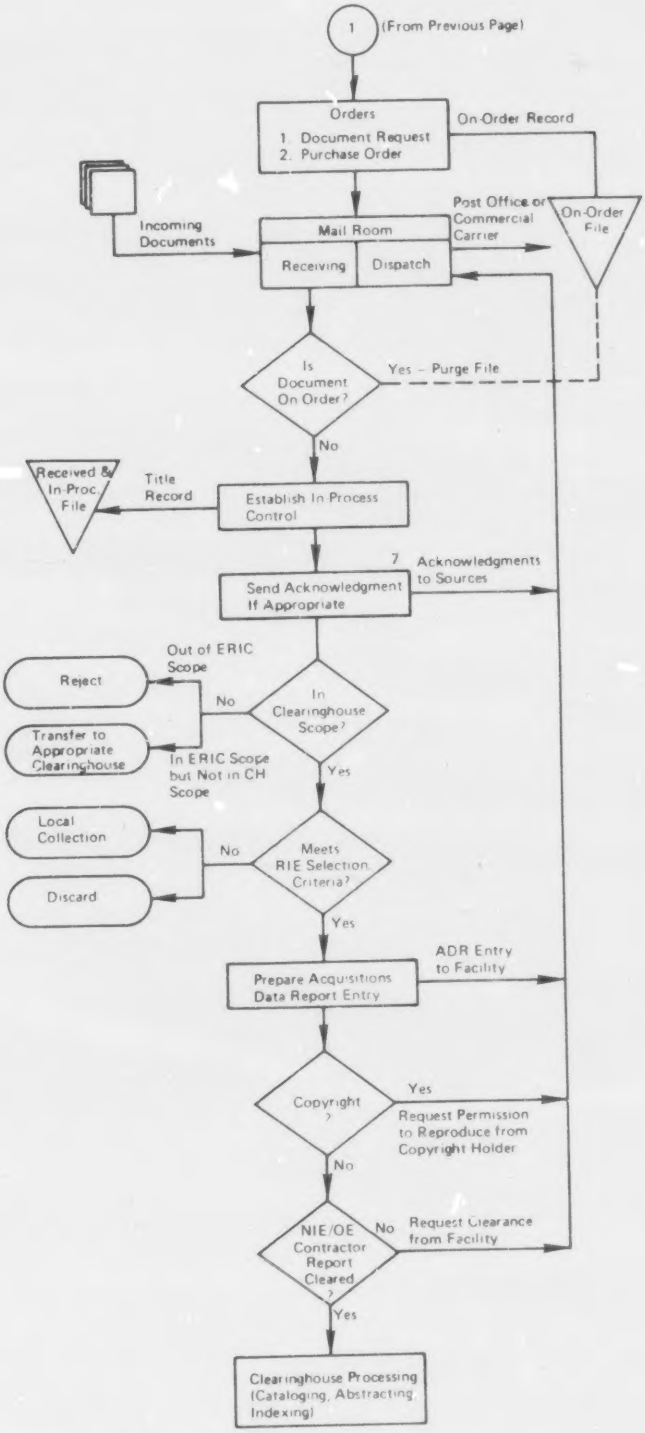

1
(From Previous Page)
Orders
1. Document Request
2. Purchase Order
On-Order Record
On-Order File
Incoming Documents
Mail Room
Receiving
Dispatch
Post Office or Commercial Carrier
Is Document On Order?
Yes – Purge File
No
Received & In-Proc. File
Title Record
Establish In-Process Control
Send Acknowledgment If Appropriate
7 Acknowledgments to Sources
Out of ERIC Scope
Reject
No
In Clearinghouse Scope?
Transfer to Appropriate Clearinghouse
In ERIC Scope but Not in CH Scope
Yes
Local Collection
No
Meets RIE Selection Criteria?
Discard
Yes
Prepare Acquisitions Data Report Entry
ADR Entry to Facility
Copyright ?
Yes
Request Permission to Reproduce from Copyright Holder
No
NIE/OE Contractor Report Cleared ?
No
Request Clearance from Facility
Yes
Clearinghouse Processing (Cataloging, Abstracting, Indexing)

FIGURE 2-5
Sheet 2

Each subject area, and hence each Clearinghouse, has its own major reference tools. Clearinghouse personnel should take care to familiarize themselves with the specific reference tools that best fit their area of coverage and should see that they are represented in their reference collection.

2.4.4 Clearinghouse Operations (Typical)

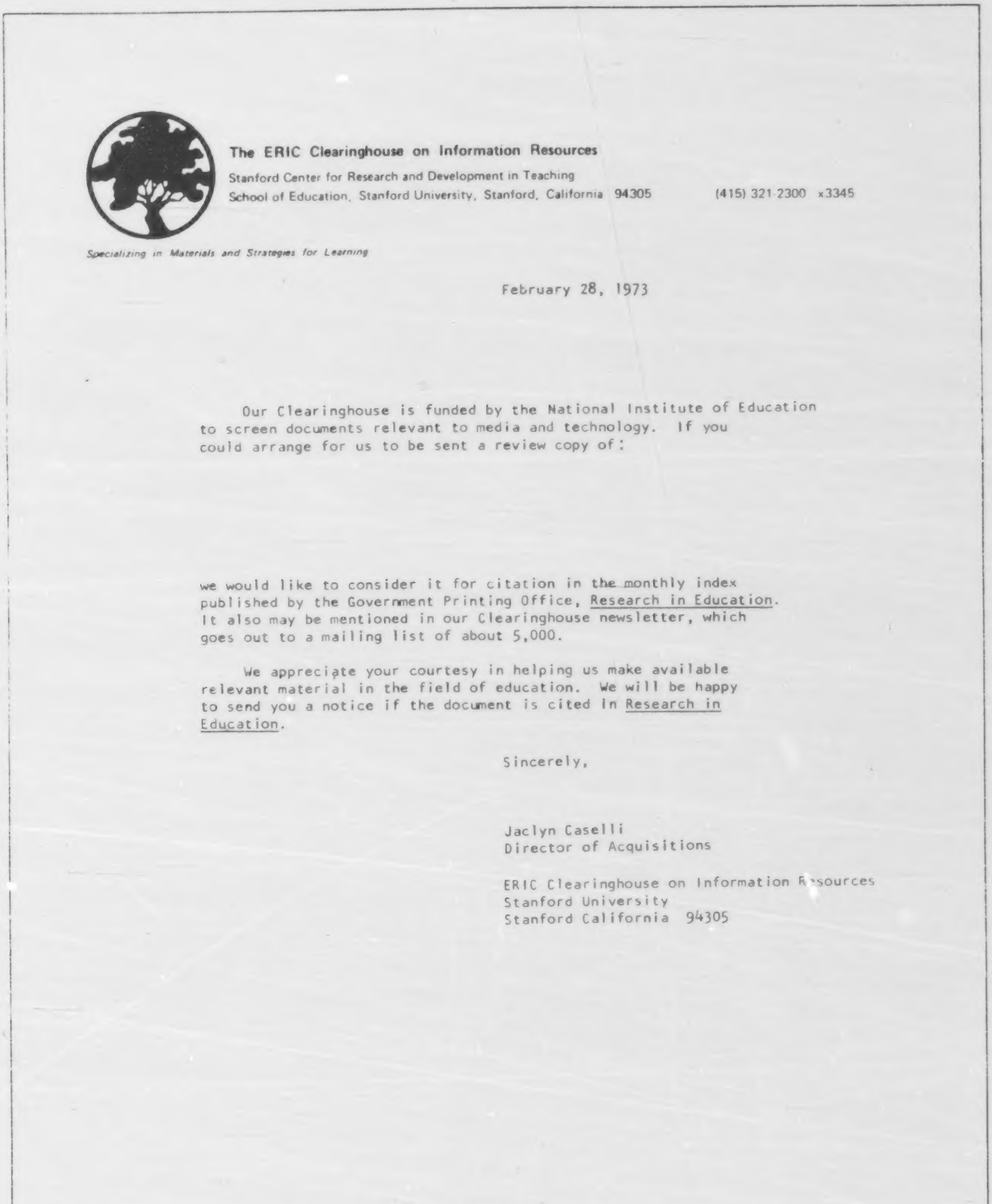
Clearinghouse acquisitions operations differ from one another in procedural detail, forms and files used, recordkeeping, and in other respects. No matter how they are implemented, however, every Clearinghouse acquisition operation is expected to observe the basic functional steps described below.

1. Identify specific titles which appear to be desirable acquisitions;

2. Check local "on-order" files and standard ERIC duplicate checking tools (such as the Title Index and Acquisitions Data Report) to determine if the identified items have already been ordered, received, or processed.

3. If the item is not found in step #2, prepare a request letter or purchase order (as appropriate) for transmittal to the document source (See examples in Figures 2-6 and 2-7). Also prepare an "on-order" record (See example in Figure 2-8). In both cases, it is advisable to provide as much bibliographic data as is available. As a minimum, however, provide the title, author, publisher, number of copies wanted, price (if appropriate), and date ordered.

4. As documents are received, check them against the "on-order" record and either purge the file, or indicate on the record that the item has been received. Clearinghouses may wish to acknowledge receipt of documents (and engender additional contributions) by means of "Thank You" notes or letters directed at the author or source (See Figures 2-9 A and B for examples). Occasionally copies of the RIE announcements or the resume forms for the document in question may be sent with these notes. Clearinghouses are cautioned, however, against automatic and indiscriminate following of this



The ERIC Clearinghouse on Information Resources
Stanford Center for Research and Development in Teaching
School of Education, Stanford University, Stanford, California 94305 (415) 321-2300 x3345

Specializing in Materials and Strategies for Learning

February 28, 1973

Our Clearinghouse is funded by the National Institute of Education to screen documents relevant to media and technology. If you could arrange for us to be sent a review copy of:

we would like to consider it for citation in the monthly index published by the Government Printing Office, Research in Education. It also may be mentioned in our Clearinghouse newsletter, which goes out to a mailing list of about 5,000.

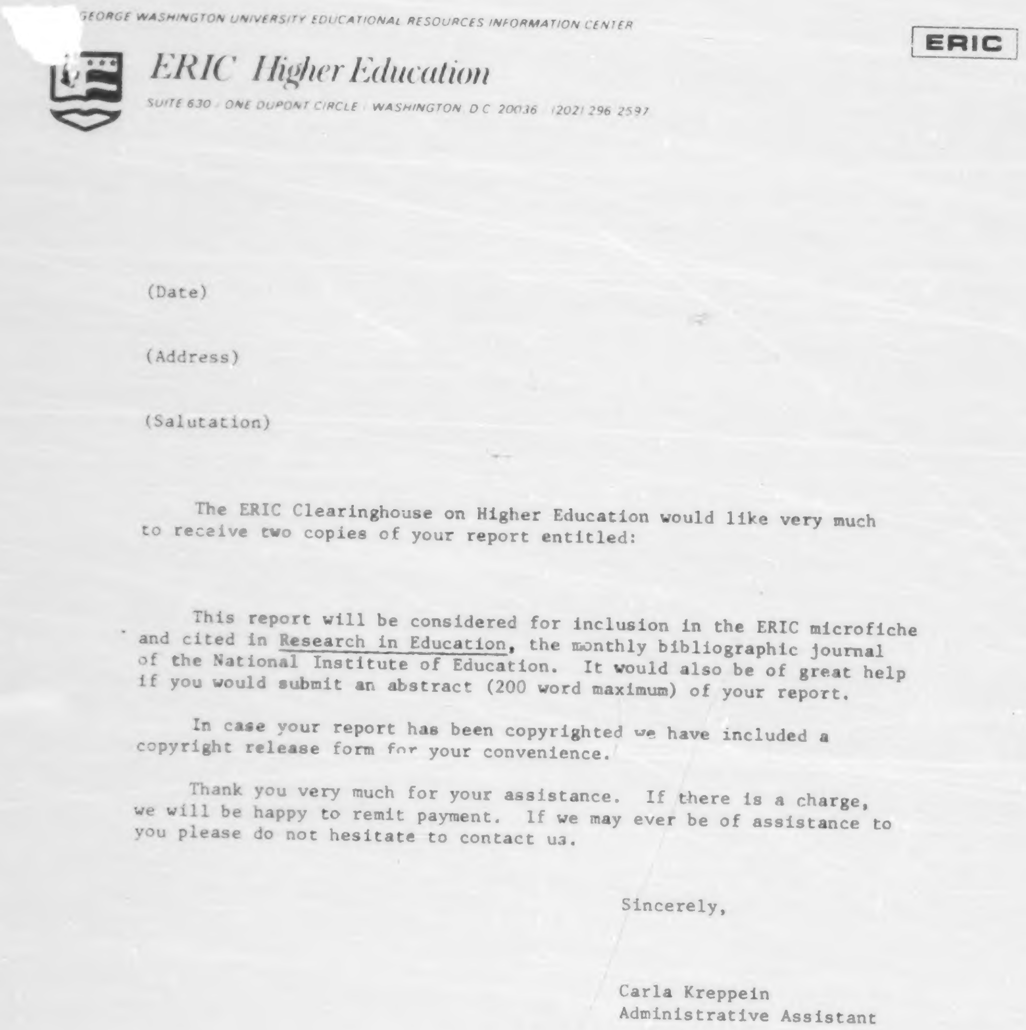
We appreciate your courtesy in helping us make available relevant material in the field of education. We will be happy to send you a notice if the document is cited in Research in Education.

Sincerely,

Jaclyn Caselli
Director of Acquisitions

ERIC Clearinghouse on Information Resources
Stanford University
Stanford California 94305

FIGURE 2-6A
DOCUMENT REQUEST LETTER
(EXAMPLE)



GEORGE WASHINGTON UNIVERSITY EDUCATIONAL RESOURCES INFORMATION CENTER

ERIC Higher Education

SUITE 630 · ONE DUPONT CIRCLE · WASHINGTON D C 20036 · (202) 296 2597

ERIC

(Date)

(Address)

(Salutation)

The ERIC Clearinghouse on Higher Education would like very much to receive two copies of your report entitled:

This report will be considered for inclusion in the ERIC microfiche and cited in Research in Education, the monthly bibliographic journal of the National Institute of Education. It would also be of great help if you would submit an abstract (200 word maximum) of your report.

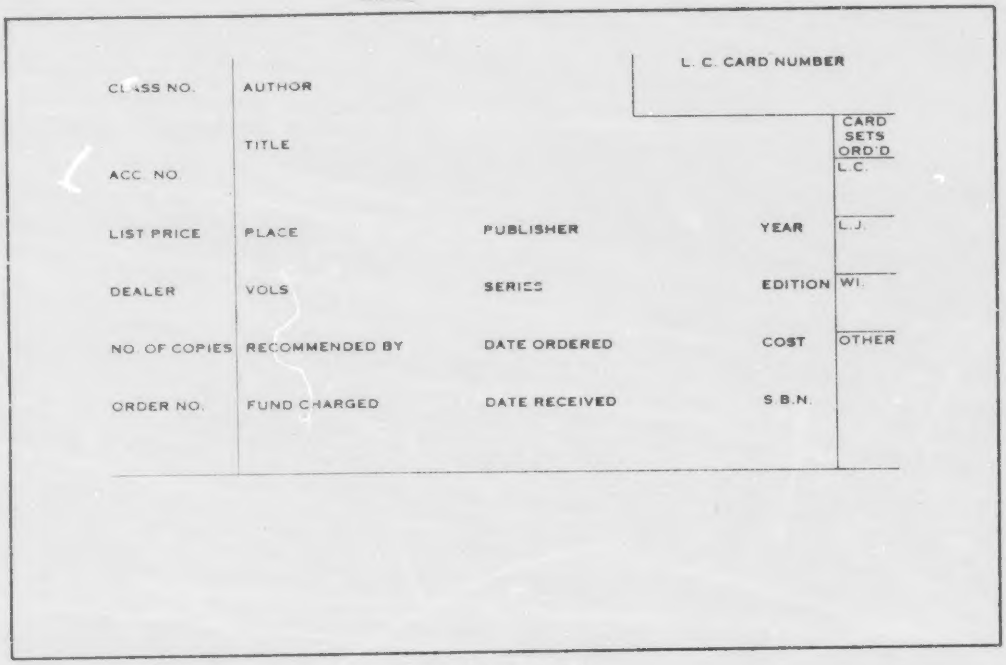
In case your report has been copyrighted we have included a copyright release form for your convenience.

Thank you very much for your assistance. If there is a charge, we will be happy to remit payment. If we may ever be of assistance to you please do not hesitate to contact us.

Sincerely,

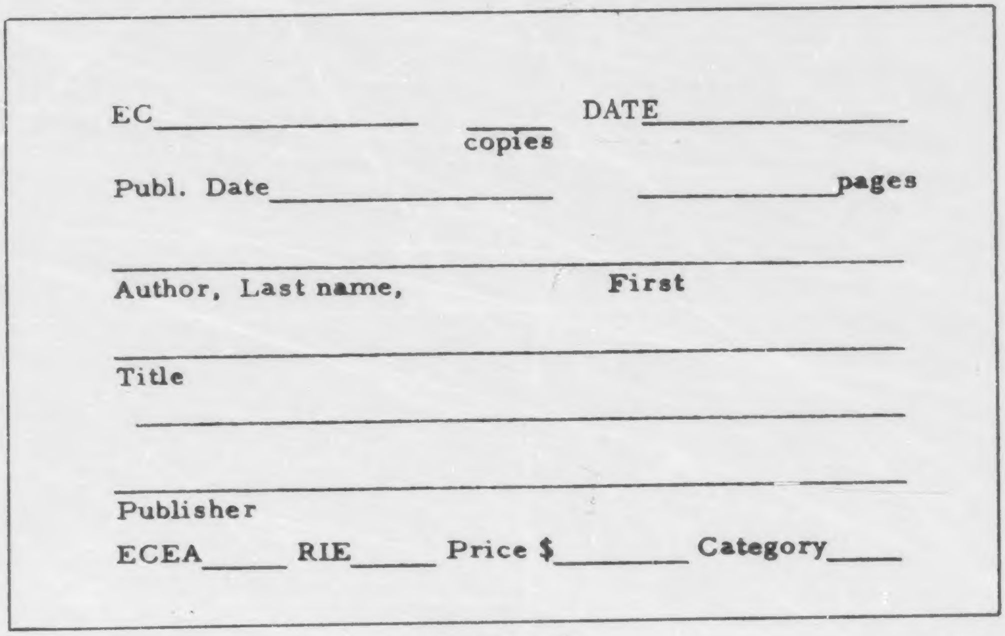
Carla Kreppein
Administrative Assistant

FIGURE 2-6B
DOCUMENT REQUEST LETTER
(EXAMPLE)



CLASS NO.	AUTHOR		L. C. CARD NUMBER	
	TITLE			CARD SETS ORD'D
ACC. NO.				L.C.
LIST PRICE	PLACE	PUBLISHER	YEAR	L.J.
DEALER	VOLS	SERIES	EDITION	WI.
NO. OF COPIES	RECOMMENDED BY	DATE ORDERED	COST	OTHER
ORDER NO.	FUND CHARGED	DATE RECEIVED	S.B.N.	

FIGURE 2-7
DOCUMENT PURCHASE ORDER (EXAMPLE)



EC______________ _____ **copies** **DATE**______________

Publ. Date______________ __________ **pages**

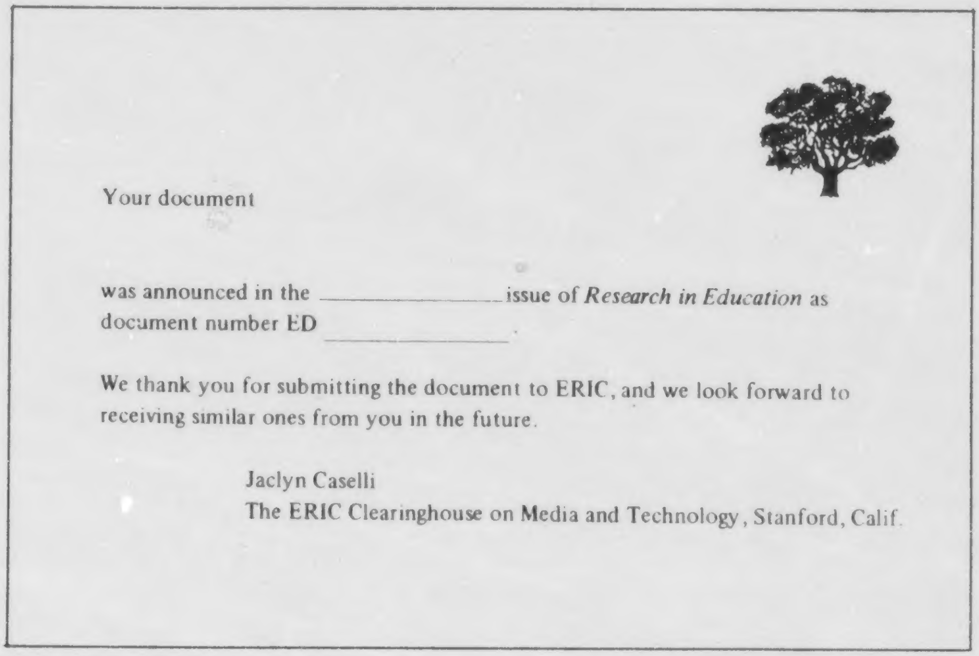
Author, Last name, **First**

Title

Publisher

ECEA_____ **RIE**_____ **Price $**_______ **Category**_____

FIGURE 2-8
"ON-ORDER" RECORD CARD



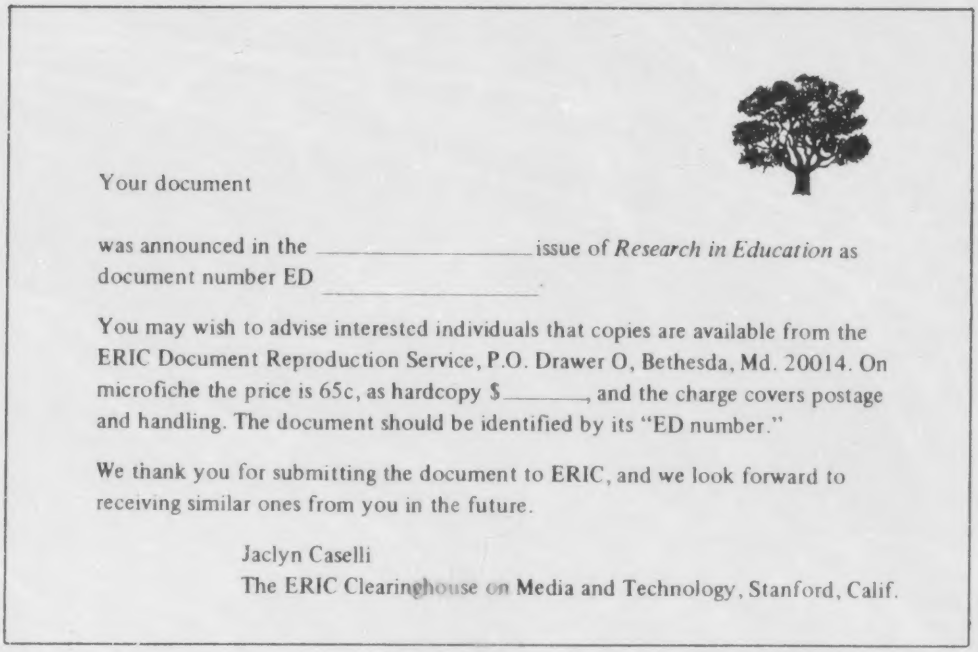
Your document

was announced in the ______________ issue of *Research in Education* as document number ED ______________.

We thank you for submitting the document to ERIC, and we look forward to receiving similar ones from you in the future.

Jaclyn Caselli
The ERIC Clearinghouse on Media and Technology, Stanford, Calif.

FIGURE 2-9A
ACKNOWLEDGMENT TO DOCUMENT CONTRIBUTOR (EXAMPLE)



Your document

was announced in the ______________ issue of *Research in Education* as document number ED ______________.

You may wish to advise interested individuals that copies are available from the ERIC Document Reproduction Service, P.O. Drawer O, Bethesda, Md. 20014. On microfiche the price is 65c, as hardcopy $______, and the charge covers postage and handling. The document should be identified by its "ED number."

We thank you for submitting the document to ERIC, and we look forward to receiving similar ones from you in the future.

Jaclyn Caselli
The ERIC Clearinghouse on Media and Technology, Stanford, Calif.

FIGURE 2-9B
ACKNOWLEDGMENT TO DOCUMENT CONTRIBUTOR (EXAMPLE)

practice. Acknowledgements directed at highly placed officials, not familiar with ERIC, can be inappropriate and counterproductive.

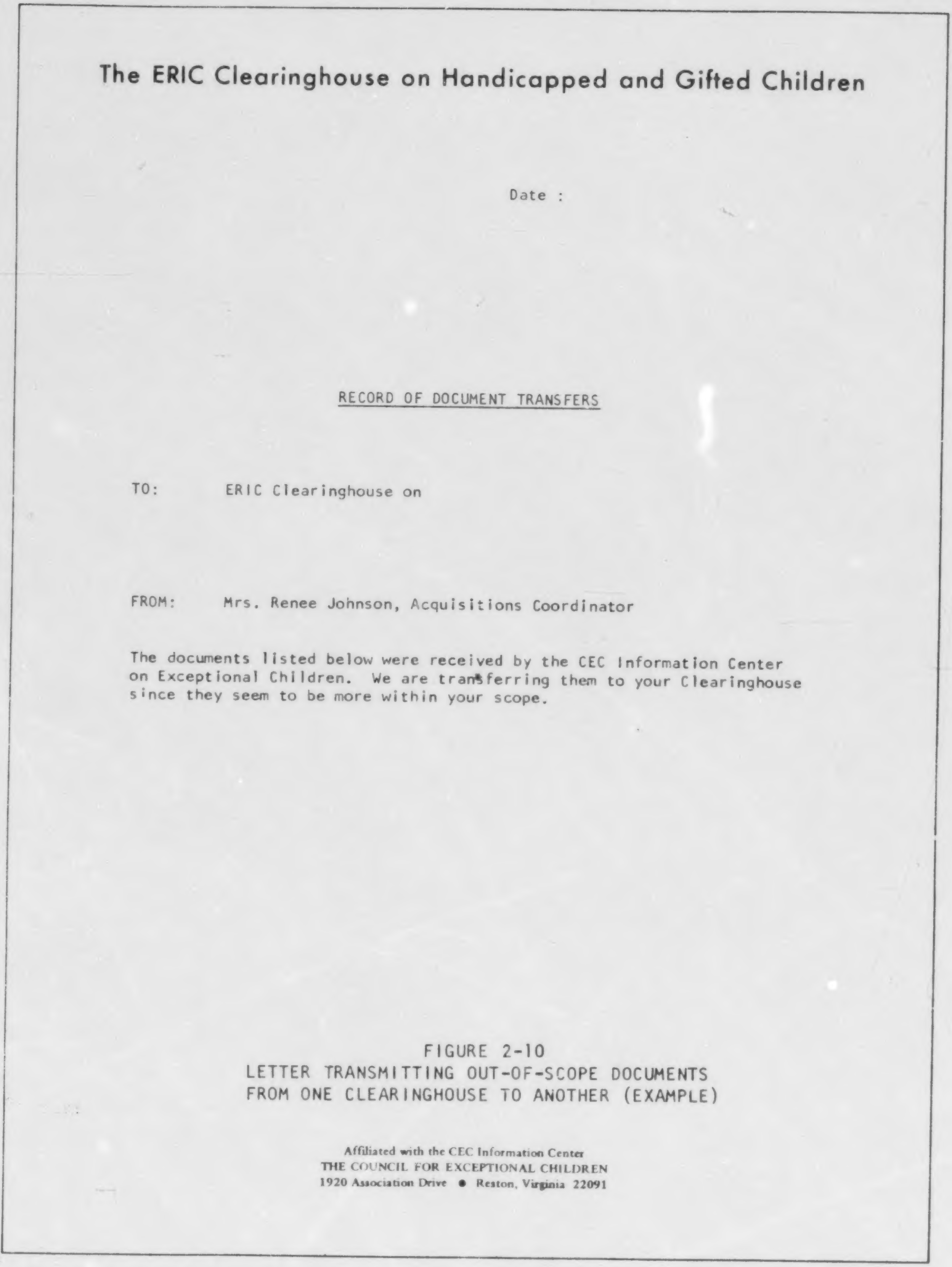
5. Evaluate received material against the prescribed physical, content, and quality selection criteria (Section 3), and against the Clearinghouse's Scope of Interest statement. Documents inappropriate for the system may be discarded or kept for local collections; documents falling within the scope of other Clearinghouses should be transferred to them (see Figure 2-10 for example of transfer letter). Likewise, if Clearinghouse A discovered that Clearinghouse B has obtained and is processing a document that might more appropriately be handled by Clearinghouse A, then the two Clearinghouses should negotiate the matter over the telephone.

6. Prepare an entry for the Acquisitions Data Report (a composite report prepared monthly by the Facility reflecting the acquisitions of all Clearinghouses during the previous month period). This step requires the Clearinghouse to formally accession the document and assign to it a temporary Clearinghouse Accession Number. (Instructions on how to prepare entries for this report are provided in Section 4.)

7. Resolve any copyright or reproduction release questions (See Section 2.4.5 "Copyright and Reproduction Releases").

8. All reports sponsored by NIE must be approved/accepted by the NIE Project Officer before being processed. Normally the Clearinghouses receive such reports from the Facility; it can be assumed that these reports have been approved. Any NIE contract/grant reports received from other sources must be cleared either by Central ERIC or the ERIC Facility before they can be processed. This clearance can be sought either by telephone or in writing.

9. All reports sponsored by OE must also be approved/accepted before being processed. Reports received directly from the Facility can be assumed to be approved. In the case of reports received via other channels, copies of the title pages should



The ERIC Clearinghouse on Handicapped and Gifted Children

Date :

RECORD OF DOCUMENT TRANSFERS

TO: ERIC Clearinghouse on

FROM: Mrs. Renee Johnson, Acquisitions Coordinator

The documents listed below were received by the CEC Information Center on Exceptional Children. We are transferring them to your Clearinghouse since they seem to be more within your scope.

FIGURE 2-10
LETTER TRANSMITTING OUT-OF-SCOPE DOCUMENTS
FROM ONE CLEARINGHOUSE TO ANOTHER (EXAMPLE)

Affiliated with the CEC Information Center
THE COUNCIL FOR EXCEPTIONAL CHILDREN
1920 Association Drive • Reston, Virginia 22091

be sent to the Facility. If the Facility has not responded within a two-week period, the Clearinghouse can assume there is no objection to processing the report and should proceed accordingly.

10. After all the above steps are completed and the document is determined to be suitable for RIE, legible, not a duplicate, cleared by the Government Project Officer (where appropriate), and without any unresolved reproduction problems, acquisitions formally comes to an end and the document is ready for the cataloging/indexing/abstracting process. Because of the expense of the various intellectual document analysis functions, the acquisitions function must make every effort to eliminate duplicates before that stage of processing is reached.

2.4.5 Copyright and Reproduction Releases

All copyrighted documents, documents bearing reproduction restrictions, or documents being sold by the source, require special attention. A decision must be reached as to whether it is necessary to seek a reproduction release from the source. Normally a release should be requested when: (1) the publisher is obscure or transient and the item would not be readily available in the future; (2) a limited quantity has been produced, also indicating future availability problems; (3) only a portion of the document is copyrighted; (4) the source is highly interested in achieving wide dissemination and ERIC can help achieve this; (5) the source is non-commercial in nature; (6) there are any other indications that the document is likely to go out-of-print rapidly and that an ERIC microfiche would perpetuate the availability of the document for future users.

Because commercial publications are not usually made available through EDRS, permission to reproduce is rarely requested from established commercial publishing houses.

Clearinghouses should obtain written permission to reproduce from the copyright holder or seller. A special Reproduction Release Form (See example in Figure 2-11) may be used, or a simple letter can suffice. The responsibility for maintaining a file of Reproduction Releases and for ensuring the accuracy of copyright information on the ERIC Report Resume form rests with the Clearinghouses.

AUTHOR(S) ____

Please check the appropriate status of the document:

_____ Copyrighted.

_____ Not Copyrighted.

If copyrighted, please complete this form.

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents abstracted for announcement in the monthly journal of the ERIC system, Research in Education, are made available to users in various ways: in microfiche and/or hard copy sold through the ERIC Document Reproduction Service, and in their original form through the publishers. Credit will be given to the source of each document and if reproduction release is granted, notation will be made of any copyright in the following manner:

> "Permission to reproduce this copyrighted material has been granted by ____________________ to ERIC and organizations operating under agreements with the National Institute of Education. Further reproduction outside the ERIC system requires permission of the copyright owner."

Please check Level I or II if you grant the ERIC system permission to reproduce the document, or check Level III if permission is not granted.

_____ Level I: in microfiche (4x6 inch film) and hard copy (8½x11 inch photocopy).
_____ Level II: in microfiche (4x6 inch film) only.
_____ Level III: no reproduction release granted.

If you checked Level I or Level II, please sign the following release:

> I hereby grant to the Educational Resources Information Center (ERIC) and to organizations operating under agreement with the National Institute of Education permission to abstract the above referred to document, to reproduce this document or abstracts thereof by means of microfiche or otherwise, and to disseminate as part of the ERIC system. The authorization to abstract and reproduce copyright materials, however, does not extend to users of the ERIC system.

Signature ________________________________ Date ____________
Title ____
Organization ____
Address of Organization ____________________________________
________________________________ Zip ____________

If you checked Level III, we would like the following information regarding the availability of the document:

Publisher or Distributor: ____________________________________

Address ____________________________________

Price per copy ____________ Quantity Price ____________

FIGURE 2-11
REPRODUCTION RELEASE FORM (EXAMPLE)

The problem of determining the copyright or proprietary rights status of a work and obtaining releases can be complex and time-consuming. One publication which can help is How To Investigate the Copyright Status of a Work (Washington, D. C., Copyright Office, 1973. Circular 22).

2.4.6 Reporting to Central ERIC

The following statistics for Clearinghouse acquisition efforts are required by Central ERIC to be reported on a quarterly basis and at the annual review:

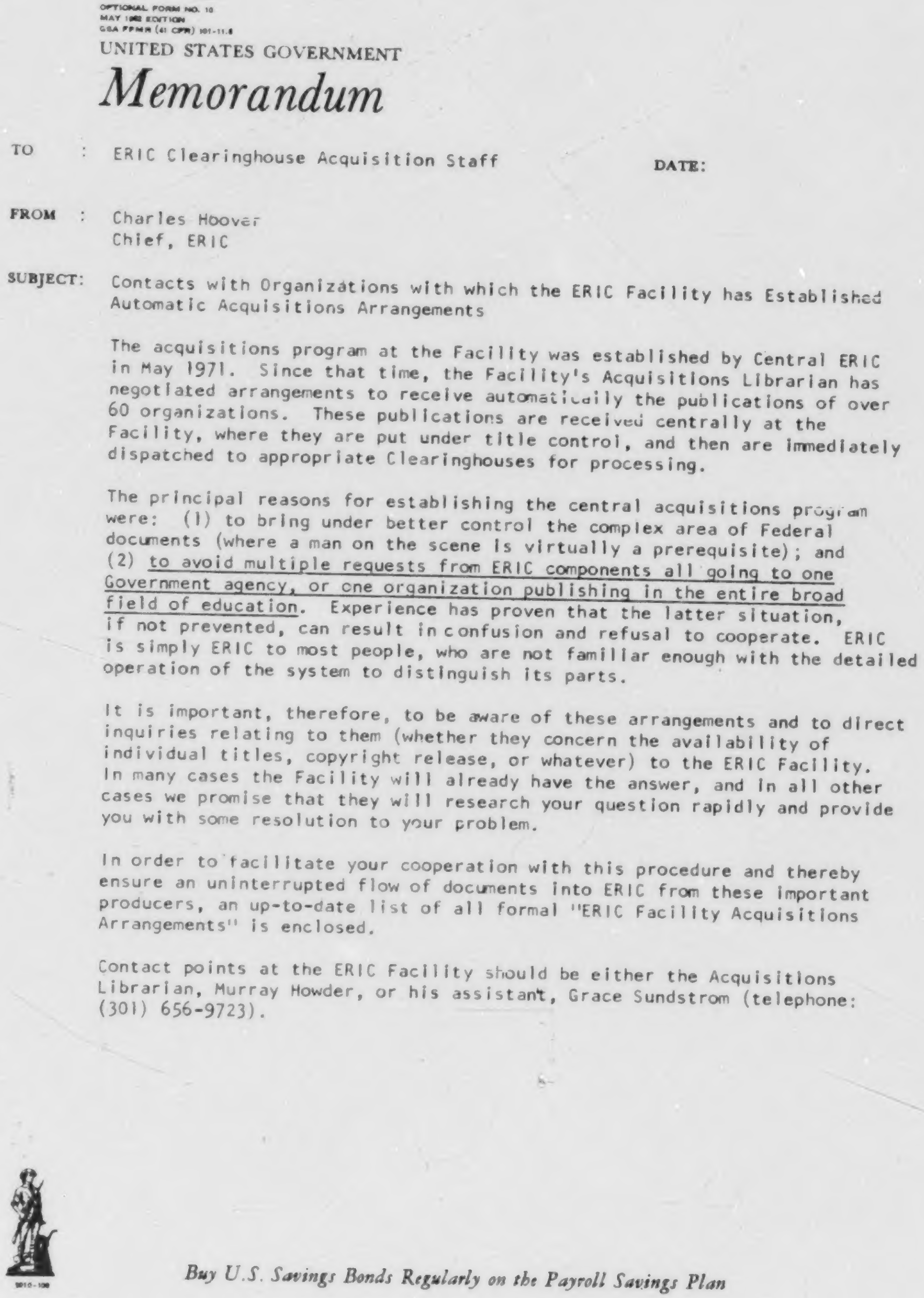
Total documents procured
Number of documents solicited
Number of documents unsolicited
Number of documents selected for RIE
Number of documents selected for local files
Number of documents rejected
Number of documents transferred (to other Clearinghouses)

For more detail on reporting requirements, see the Administrative Procedures Manual. For suggested procedures for keeping statistics, See Section 4.3.

2.5 ERIC FACILITY ACQUISITIONS PROGRAM

2.5.1 Purpose and Scope

The ERIC Facility Acquisitions Program was initiated in order to increase the flow of documents to the Clearinghouses from certain sectors, to build a foundation of automatic distribution arrangements, to serve as an expediter for the complex area of Federal Government documents (where being on the scene is virtually a prerequisite), and to coordinate network acquisition efforts so as to avoid multiple requests going from various ERIC components to one Government agency, or one organization publishing broadly in the field of education. Facility efforts are concentrated in the area of Federal Government agencies and quasi-governmental organizations, intergovernmental and international organizations, to which the U. S. Government belongs, general educational publishers (such as NEA), and certain organizations, which, upon their own initiative have approached the Facility. (See Figure 2-12.)



OPTIONAL FORM NO. 10
MAY 1962 EDITION
GSA FPMR (41 CFR) 101-11.6

UNITED STATES GOVERNMENT

Memorandum

TO : ERIC Clearinghouse Acquisition Staff **DATE:**

FROM : Charles Hoover
Chief, ERIC

SUBJECT: Contacts with Organizations with which the ERIC Facility has Established Automatic Acquisitions Arrangements

The acquisitions program at the Facility was established by Central ERIC in May 1971. Since that time, the Facility's Acquisitions Librarian has negotiated arrangements to receive automatically the publications of over 60 organizations. These publications are received centrally at the Facility, where they are put under title control, and then are immediately dispatched to appropriate Clearinghouses for processing.

The principal reasons for establishing the central acquisitions program were: (1) to bring under better control the complex area of Federal documents (where a man on the scene is virtually a prerequisite); and (2) to avoid multiple requests from ERIC components all going to one Government agency, or one organization publishing in the entire broad field of education. Experience has proven that the latter situation, if not prevented, can result in confusion and refusal to cooperate. ERIC is simply ERIC to most people, who are not familiar enough with the detailed operation of the system to distinguish its parts.

It is important, therefore, to be aware of these arrangements and to direct inquiries relating to them (whether they concern the availability of individual titles, copyright release, or whatever) to the ERIC Facility. In many cases the Facility will already have the answer, and in all other cases we promise that they will research your question rapidly and provide you with some resolution to your problem.

In order to facilitate your cooperation with this procedure and thereby ensure an uninterrupted flow of documents into ERIC from these important producers, an up-to-date list of all formal "ERIC Facility Acquisitions Arrangements" is enclosed.

Contact points at the ERIC Facility should be either the Acquisitions Librarian, Murray Howder, or his assistant, Grace Sundstrom (telephone: (301) 656-9723).

5010-108

Buy U.S. Savings Bonds Regularly on the Payroll Savings Plan

FIGURE 2-12
ERIC FACILITY ACQUISITIONS PROGRAM - GENERAL DESCRIPTION

In addition, the Facility receives all NIE and OE input from Central ERIC and all unsolicited input arriving at Central ERIC or EDRS. All such documents are assigned to appropriate Clearinghouses for processing. The Facility maintains the ERIC Clearinghouse Scope of Interest Manual (See Appendix C) on the basis of information received from the Clearinghouses.

The Facility functions in many respects as a direct extension of Central ERIC. It operates in the same areas, it receives direct requests for action from Central ERIC involving both automatic arrangements and specific documents, it works closely with Central ERIC in an effort to see that all NIE and OE internal reports are obtained for the system. Visits to Government agencies to establish arrangements are often made by Central ERIC and Facility staff working together. Special projects are often assigned to the Facility by Central ERIC.

Facility acquisitions are intended to augment and supplement the main ERIC acquisitions effort, which resides at the Clearinghouses.

2.5.2 ERIC Facility Acquisitions Arrangements (EFAA's)

The first phase of the Facility program consisted of a review of all known acquisitions arrangements between Central ERIC or individual ERIC Clearinghouses and Government agencies or NEA affiliates. As a result of this review, arrangements were classified into two groups: (1) those that were active and working satisfactorily; (2) those that were inactive, or in some other respect not functioning as originally established.

The second phase of the Facility program consisted of systematic contacts with all organizations in group #2 above. Agreements were either abolished as obsolete, or renewed, with a fresh exchange of letters, if necessary.

The third phase is ongoing and involves the consummation of new and needed agreements where none had previously existed.

Figure 2-13 presents a complete list of ERIC Facility Acquisitions Arrangements, including those pre-existing arrangements which were found to be working satisfactorily. New agreements are added to the list as they are consummated.

ERIC FACILITY ACQUISITIONS ARRANGEMENTS

CONTRIBUTING INSTITUTION	EFAA NUMBER	PRESCRIBED LEVEL OF INPUT
Advisory Commission on Intergovernmental Relations	22	I
Agency for International Development	23	I
Agricultural Research Service	58	I
Agriculture Extension Service	59	I
Air Force Reserve Officers Training Corps	43	I
Association for Supervision and Curriculum Development (ASCD)	50	II
Association of Teacher Educators (ATE)	*	
Atlanta Public Schools	68	I
Bureau of Curriculum Development, City of New York	*	
Bureau of Education for the Handicapped (BEH)	*	
Cabinet Committee on Opportunities for Spanish Speaking People	60	I
City of Toronto Board of Education	35	I
Civil Service Commission: Bureau of Training	38	I
Civil Service Commission: Public Policy Employment Program	52	I
College Entrance Examination Board (CEEB)	*	
Commission on Civil Rights	31	I
Community College of the Air Force	62	I
Cooperative Accountability Project	64	I
Council of Europe	72	I (free) or II (sales)
Council on Instruction and Personnel Development (CIPD)	*	
Dade County Public Schools	36	I
Department of Commerce: New England Program in Teacher Education	33	I
Department of Labor: Bureau of Labor Statistics	9	I
Department of Labor: Child Labor Division	8	I
Department of Labor: Training and Employment Service	6	I
Department of Labor: Women's Bureau	10	I
Department of the Navy: Chief of Naval Training Support	46	I
District of Columbia Public Schools	3	I
Education Commission of the States: Handicapped Children's Education Program (HACHE)	66	I
Education Commission of the States: National Assessment of Educational Progress	53	I
Federal Aviation Administration	40	I
Federal Communications Commission	30	I
General Accounting Office	5	I
HEW: Administration on Aging	7	I
HEW: Office of Child Development, Child Care Program	20	I
HEW: Office of Child Development, Home Start Program	21	I
HEW: Office of New Careers	29	I
HEW: Office for Civil Rights	47	I
Human Resources Research Organization (HumRRO)	45	I
Joint Economic Committee: Subcommittee on Fiscal Policy	56	I
Library of Congress: Division for the Blind and Physically Handicapped	4	I
Library of Congress: Exchange and Gift Division	2	I

FIGURE 2-13
ERIC FACILITY ACQUISITIONS ARRANGEMENTS - LIST

CONTRIBUTING INSTITUTION	EFAA NUMBER	PRESCRIBED LEVEL OF INPUT
National Academy of Engineering: Commission on Education	71	I
National Advisory Council on Extension and Continuing Education	65	I
National Aeronautics and Space Administration	70	I
National Art Education Association	54	II
National Association of Elementary School Principals (NAESP)	51	II
National Center for Health Services Research and Development	44	I
National Center for Health Statistics	37	I
National Clearinghouse for Drug Abuse Information	13	I
National Commission on the Financing of Postsecondary Education	57	I
National Council of Administrative Women in Education	69	I
National Council for the Social Studies (NCSS)	*	
National Council of Teachers of Mathematics (NCTM)	*	
National Education Association (NEA)	48	II
National Endowment for the Humanities	17	I
National Institute of Mental Health: Mental Health Study Center	41	I
National Institutes of Health	1	I
National Park Service: Office of Environmental Interpretation	14	I
National Reading Council	24	I
National School Public Relations Association (NSPRA)	49	II
National Science Teachers Association (NSTA)	*	
New York State Department of Education (NYDE)	*	
Office of Consumer Affairs: Education Division	27	I
Office of Economic Opportunity: Experimental Research Division	15	I
Office of Education: Office of Public Affairs		
Office of Naval Research	32	I
Organisation for Economic Cooperation and Development (OECD)	34	I**
President's Commission on School Finance	18	I
President's Committee on Mental Retardation	11	I
Project LIFE (NEA)	55	I
Rand Corporation	*	
Regional Economic Coordination Council	19	I
Research and Information Services for Education (RISE)	67	I
Schools Council (UK)	39	I (free) or III (copyright)
Senate Select Committee on Equal Educational Opportunity	12	I
Small Business Administration: Education Division	28	I
Surgeon General's Scientific Advisory Commission on TV and Social Behavior	25	I
UNESCO	63	I (nonsales) or III (sales)
U. S. National Commission for UNESCO	26	I (nonsales) III (sales)
University of Pittsburgh: University-Urban Interface Program	42	I
White House Conference on Aging	16	I

*Pre-Existing Arrangment

**EDRS Price ≥ 150% OECD Price = Level I
EDRS Price < 150% OECD Price = Level II

FIGURE 2-13
Sheet 2

Every six months an updated list is sent to the Clearinghouses. Questions concerning these arrangements should be directed to the Facility and not to the organization itself. (See Fig. 2-12).

To identify potential regular producers of education-related reports among Government agencies and offices, reference tools such as the Congressional Directory, U. S. Government Organization Manual, and agency telephone directories are searched for clues. As potential new sources are identified, meetings with the appropriate agency officials are held in an attempt to establish a formal agreement. The advantages of having documents included in the ERIC Data Base, (as described in Figure 2-3A) are discussed in detail at these meetings. A frequent request made during such meetings is to supply the contributing organization with information about document disposition and, if selected for RIE, resultant ED accession number. The Reply Card procedure described in Section 4.2.10 can be utilized in such cases.

2.5.3 Screening and Obtaining Specific Documents

Because many agencies have no system for automatic distribution of documents and because others produce too few education reports in their total publications program to warrant getting all their publications, continuing effort is required to identify specific titles. A number of tools are used for this. GPO's Monthly Catalog of Government Publications is thoroughly reviewed for education-related publications. Whenever possible, specific titles are requested (in two copies) from the issuing agency. When titles are available only from GPO, they are purchased (in one copy). Similarly, NTIS's biweekly Government Reports Announcements is screened (particularly Section 5) and relevant education reports purchased in microfiche (See Sections 5.3.6 and 5.3.18 for processing instructions). The AEC's Nuclear Science Abstracts and NASA's Scientific and Technical Aerospace Reports, and the publication catalogs and grant lists of various Government offices (e.g., DHEW, SRS, NIMH, etc.) are regularly scanned. Serial publications, newsletters, and periodicals in the field of education can be a rich source of information and several are subscribed to and scanned routinely, e.g., Education Daily, The Chronicle of Higher Education, Education Today, Behavior Today, Library Journal. Leads to education-related documents appearing in news releases and newspapers, cited at meetings, or transmitted from network components by word-of-mouth, are followed-up assiduously. The Clearinghouses can obtain any Federal Government or Government-contractor document that comes to their attention by requesting it from the Facility. The Facility will either obtain the document, determine that it is unavailable, or inform the Clearinghouse if it has already been obtained and assigned to another Clearinghouse. It is convenient if such requests are submitted on standard 3x5 order forms or cards. Typical such requests are shown in Figures 2-14 A and B.

A variety of forms are used in requesting specific documents. Figure 2-15 depicts the standard GPO Order Form. Figure 2-16 depicts the standard NTIS Order Form. A request may be contained in a response to an outside inquiry concerning ERIC or how to contribute documents to ERIC (see Figures 2-17 A and B). The earlier Figure 2-7 provided an example of a typical purchase order.

There is a constant flow of documents into the ERIC Facility from a variety of sources. In addition to the receipts generated by the automatic acquisitions arrangements, there are unsolicited receipts, documents forwarded from Central ERIC, EDRS, and others, and documents received because of specific requests or orders. In all cases, the Facility keeps basic title control over documents received; the Facility also keeps report number control over NIE and OE documents bearing such numbers. The Facility makes a basic duplicate check by title of all documents before sending them to the Clearinghouses for processing. However, because documents are constantly flowing into the Clearinghouses from sources other than the Facility, the Clearinghouses must still perform a duplicate check on all documents they receive. This involves primarily using the cumulative Title Index, RIE, and the Acquisitions Data Report (the record of in-process material), though sometimes other tools such as the Contract/Grant Index or the Report/Project Number Index may come into play (See Sections 4.2.2 and 4.3.3. for a full discussion of duplicate checking).

In sending documents to the Clearinghouses, the Facility always includes any letters or notes containing information that would be useful to document processors (e.g., copyright, authorship, or availability information, or relation of the document to previous RIE accessions).

Request from ERIC/CICE 10/13/73

The Study of Vocational and Technical Programs Operated by Proprietary Schools, Vol.1.

American Institutes for Research in the
Behavioral Sciences, P.O. Box 113, Palo Alto, Ca.,
94302. August 1972.

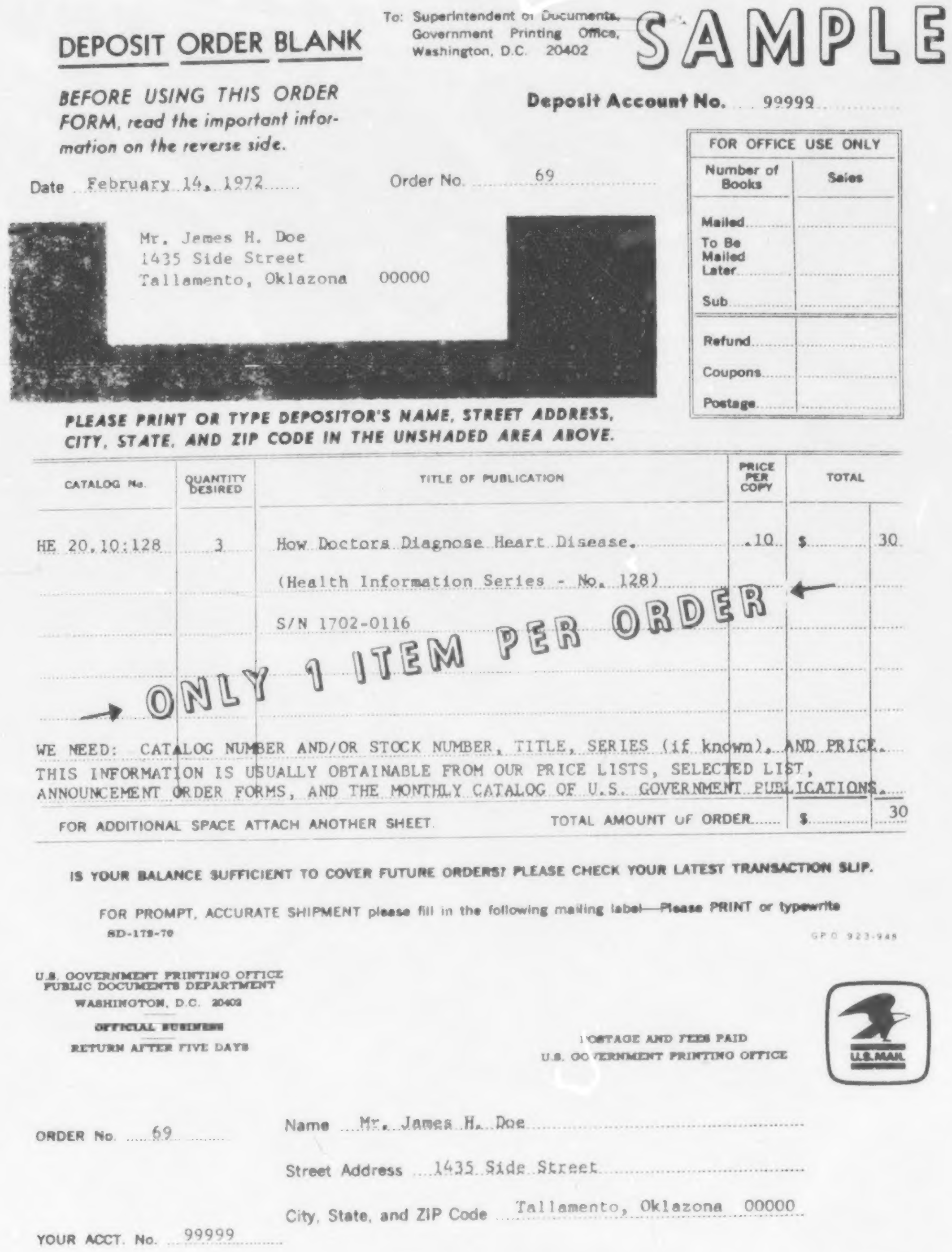
(Office of Education Contract OEC 0-70-5018)

FIGURE 2-14A
CLEARINGHOUSE REQUEST TO FACILITY FOR GOVERNMENT-CONTRACTOR DOCUMENT
(EXAMPLE)

Request from ERIC/IRCD 8/7/73

Bibliography on Ethnicity and Ethnic Groups.
National Institute of Mental Health. 1973.
GPO. HE 20.2417:Et3 $2.85.

FIGURE 2-14B
CLEARINGHOUSE REQUEST TO FACILITY FOR GOVERNMENT DOCUMENT
(EXAMPLE)



DEPOSIT ORDER BLANK

To: Superintendent of Documents,
Government Printing Office,
Washington, D.C. 20402

SAMPLE

BEFORE USING THIS ORDER FORM, read the important information on the reverse side.

Deposit Account No. 99999

Date February 14, 1972

Order No. 69

FOR OFFICE USE ONLY	
Number of Books	Sales
Mailed	
To Be Mailed Later	
Sub	
Refund	
Coupons	
Postage	

Mr. James H. Doe
1435 Side Street
Tallamento, Oklazona 00000

PLEASE PRINT OR TYPE DEPOSITOR'S NAME, STREET ADDRESS, CITY, STATE, AND ZIP CODE IN THE UNSHADED AREA ABOVE.

CATALOG No.	QUANTITY DESIRED	TITLE OF PUBLICATION	PRICE PER COPY	TOTAL
HE 20.10:128	3	How Doctors Diagnose Heart Disease.	.10	$ 30
		(Health Information Series - No. 128)		
		S/N 1702-0116		

→ ONLY 1 ITEM PER ORDER ←

WE NEED: CATALOG NUMBER AND/OR STOCK NUMBER, TITLE, SERIES (if known), AND PRICE. THIS INFORMATION IS USUALLY OBTAINABLE FROM OUR PRICE LISTS, SELECTED LIST, ANNOUNCEMENT ORDER FORMS, AND THE MONTHLY CATALOG OF U.S. GOVERNMENT PUBLICATIONS.

FOR ADDITIONAL SPACE ATTACH ANOTHER SHEET. TOTAL AMOUNT OF ORDER $ 30

IS YOUR BALANCE SUFFICIENT TO COVER FUTURE ORDERS? PLEASE CHECK YOUR LATEST TRANSACTION SLIP.

FOR PROMPT, ACCURATE SHIPMENT please fill in the following mailing label—Please PRINT or typewrite

SD-175-70

GPO 923-948

U.S. GOVERNMENT PRINTING OFFICE
PUBLIC DOCUMENTS DEPARTMENT
WASHINGTON, D.C. 20402

OFFICIAL BUSINESS
RETURN AFTER FIVE DAYS

POSTAGE AND FEES PAID
U.S. GOVERNMENT PRINTING OFFICE

U.S. MAIL

ORDER No. 69

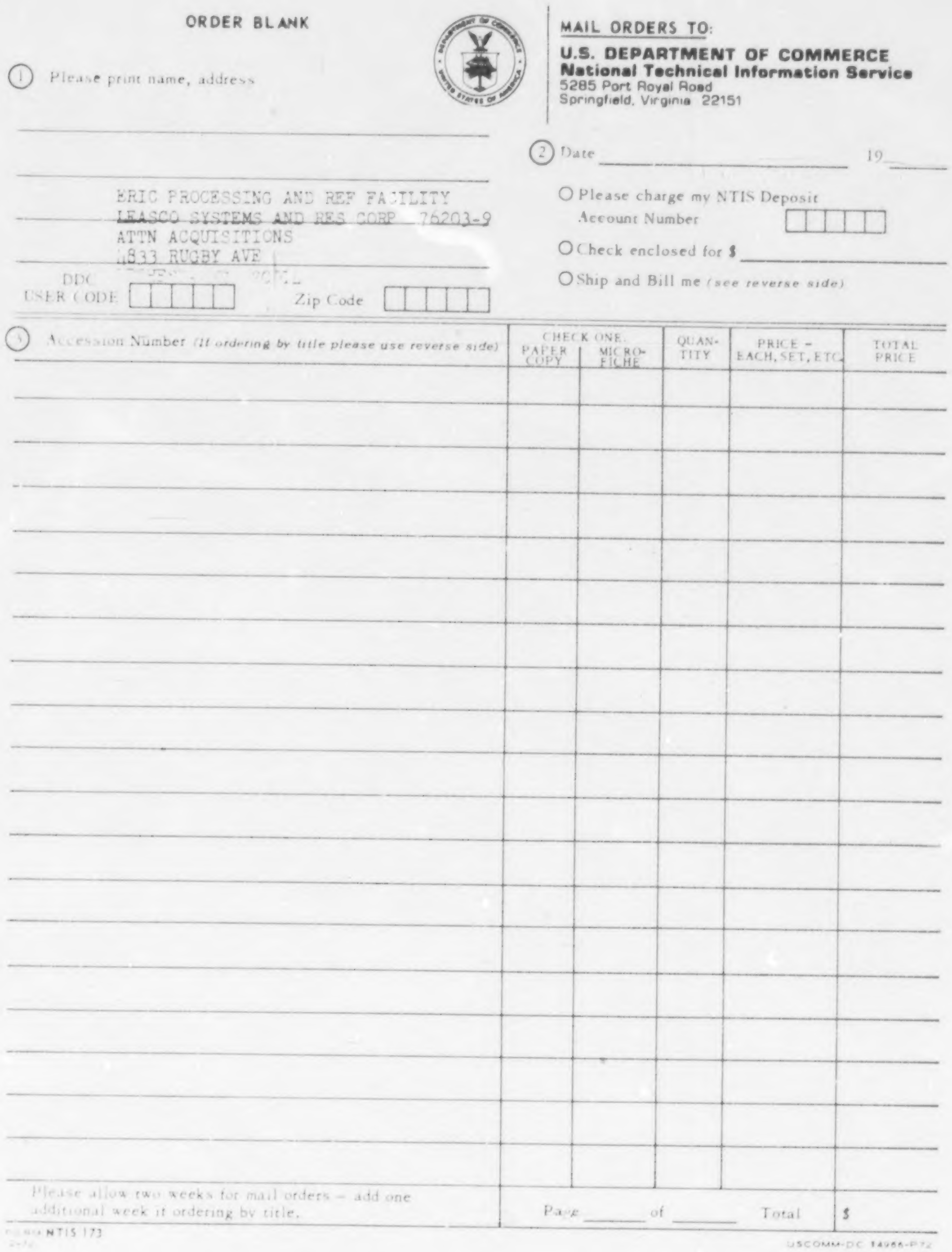
Name Mr. James H. Doe

Street Address 1435 Side Street

City, State, and ZIP Code Tallamento, Oklazona 00000

YOUR ACCT. No. 99999

FIGURE 2-15
GPO ORDER FORM



ORDER BLANK

① Please print name, address

ERIC PROCESSING AND REF FACILITY
LEASCO SYSTEMS AND RES CORP 76203-9
ATTN ACQUISITIONS
4833 RUGBY AVE
[illegible]

DDC USER CODE ☐☐☐☐☐ Zip Code ☐☐☐☐☐

MAIL ORDERS TO:

U.S. DEPARTMENT OF COMMERCE
National Technical Information Service
5285 Port Royal Road
Springfield, Virginia 22151

② Date ________________ 19____

○ Please charge my NTIS Deposit Account Number ☐☐☐☐☐

○ Check enclosed for $ ____________

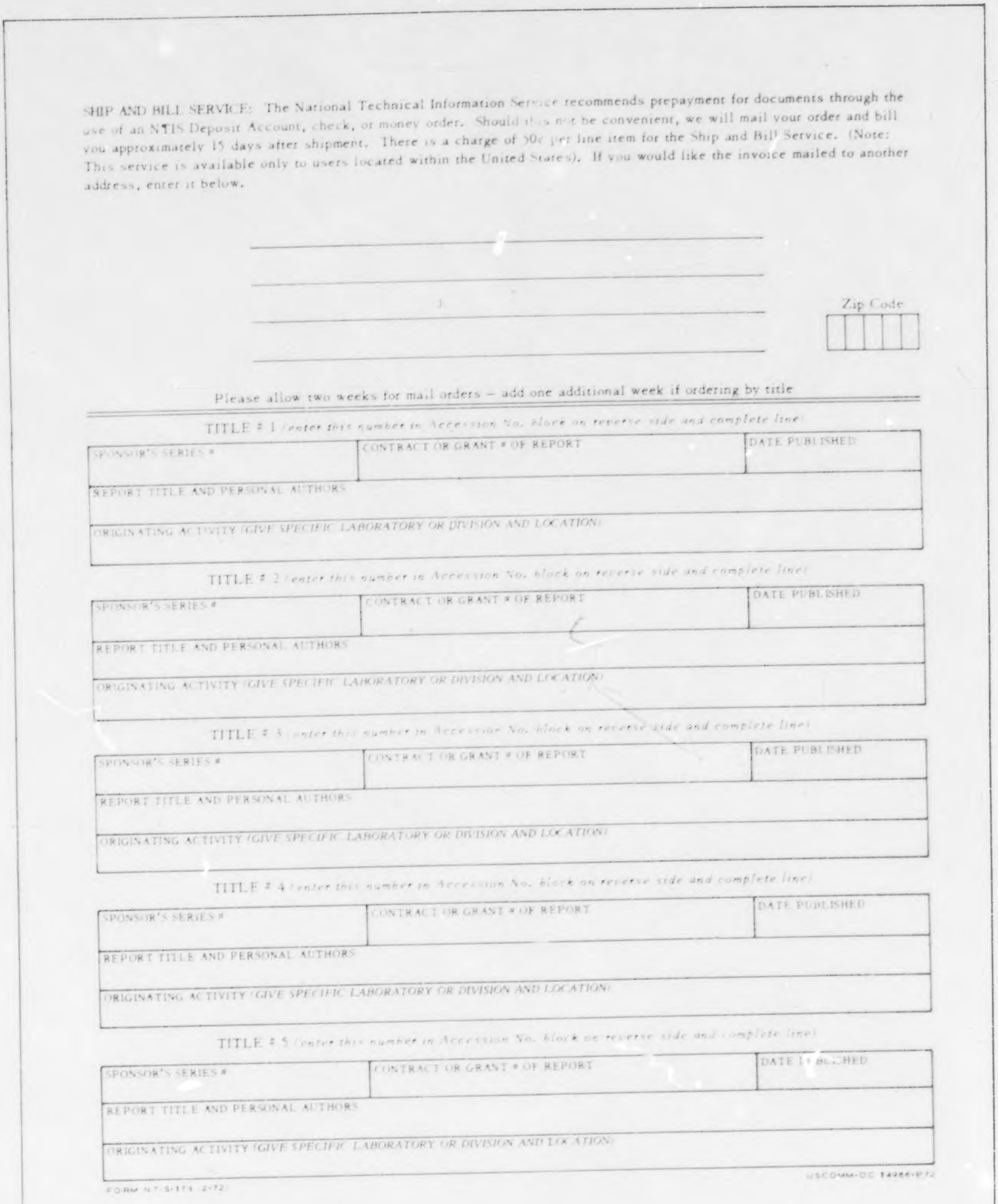
○ Ship and Bill me *(see reverse side)*

③ Accession Number *(If ordering by title please use reverse side)*	CHECK ONE. PAPER COPY	MICRO-FICHE	QUAN-TITY	PRICE - EACH, SET, ETC.	TOTAL PRICE
Please allow two weeks for mail orders – add one additional week if ordering by title.	Page ____ of ____			Total	$

FORM NTIS 173
2-72

USCOMM-DC 14986-P72

FIGURE 2-16
NTIS ORDER FORM



SHIP AND BILL SERVICE: The National Technical Information Service recommends prepayment for documents through the use of an NTIS Deposit Account, check, or money order. Should this not be convenient, we will mail your order and bill you approximately 15 days after shipment. There is a charge of 50¢ per line item for the Ship and Bill Service. (Note: This service is available only to users located within the United States). If you would like the invoice mailed to another address, enter it below.

____

____

____

____

Zip Code ☐☐☐☐☐

Please allow two weeks for mail orders — add one additional week if ordering by title

TITLE # 1 *(enter this number in Accession No. block on reverse side and complete line)*

SPONSOR'S SERIES #	CONTRACT OR GRANT # OF REPORT	DATE PUBLISHED
REPORT TITLE AND PERSONAL AUTHORS		
ORIGINATING ACTIVITY *(GIVE SPECIFIC LABORATORY OR DIVISION AND LOCATION)*		

TITLE # 2 *(enter this number in Accession No. block on reverse side and complete line)*

SPONSOR'S SERIES #	CONTRACT OR GRANT # OF REPORT	DATE PUBLISHED
REPORT TITLE AND PERSONAL AUTHORS		
ORIGINATING ACTIVITY *(GIVE SPECIFIC LABORATORY OR DIVISION AND LOCATION)*		

TITLE # 3 *(enter this number in Accession No. block on reverse side and complete line)*

SPONSOR'S SERIES #	CONTRACT OR GRANT # OF REPORT	DATE PUBLISHED
REPORT TITLE AND PERSONAL AUTHORS		
ORIGINATING ACTIVITY *(GIVE SPECIFIC LABORATORY OR DIVISION AND LOCATION)*		

TITLE # 4 *(enter this number in Accession No. block on reverse side and complete line)*

SPONSOR'S SERIES #	CONTRACT OR GRANT # OF REPORT	DATE PUBLISHED
REPORT TITLE AND PERSONAL AUTHORS		
ORIGINATING ACTIVITY *(GIVE SPECIFIC LABORATORY OR DIVISION AND LOCATION)*		

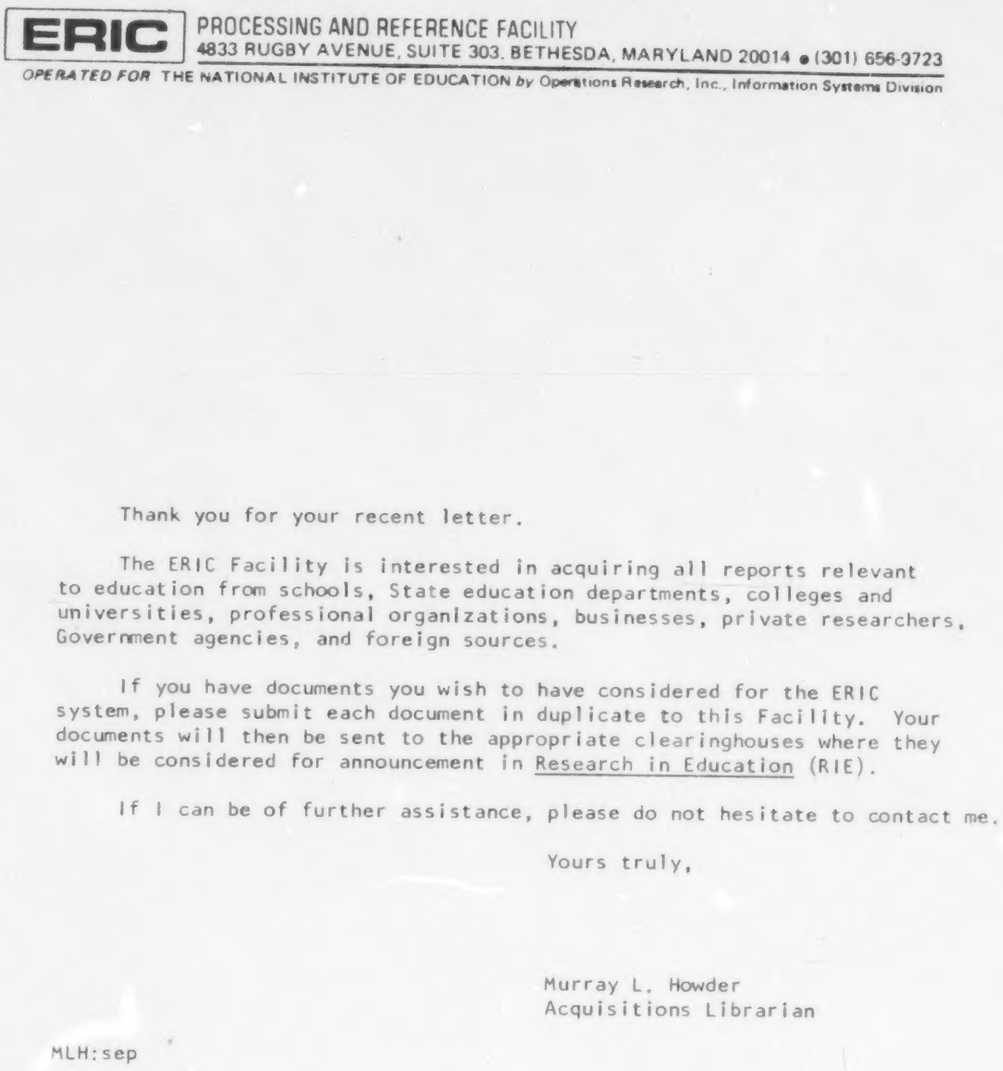
TITLE # 5 *(enter this number in Accession No. block on reverse side and complete line)*

SPONSOR'S SERIES #	CONTRACT OR GRANT # OF REPORT	DATE PUBLISHED
REPORT TITLE AND PERSONAL AUTHORS		
ORIGINATING ACTIVITY *(GIVE SPECIFIC LABORATORY OR DIVISION AND LOCATION)*		

FORM NTIS-173 (2-72)

USCOMM-DC 14966-P72

FIGURE 2-16
Sheet 2



ERIC PROCESSING AND REFERENCE FACILITY
4833 RUGBY AVENUE, SUITE 303, BETHESDA, MARYLAND 20014 • (301) 656-9723
OPERATED FOR THE NATIONAL INSTITUTE OF EDUCATION *by* Operations Research, Inc., Information Systems Division

Thank you for your recent letter.

The ERIC Facility is interested in acquiring all reports relevant to education from schools, State education departments, colleges and universities, professional organizations, businesses, private researchers, Government agencies, and foreign sources.

If you have documents you wish to have considered for the ERIC system, please submit each document in duplicate to this Facility. Your documents will then be sent to the appropriate clearinghouses where they will be considered for announcement in Research in Education (RIE).

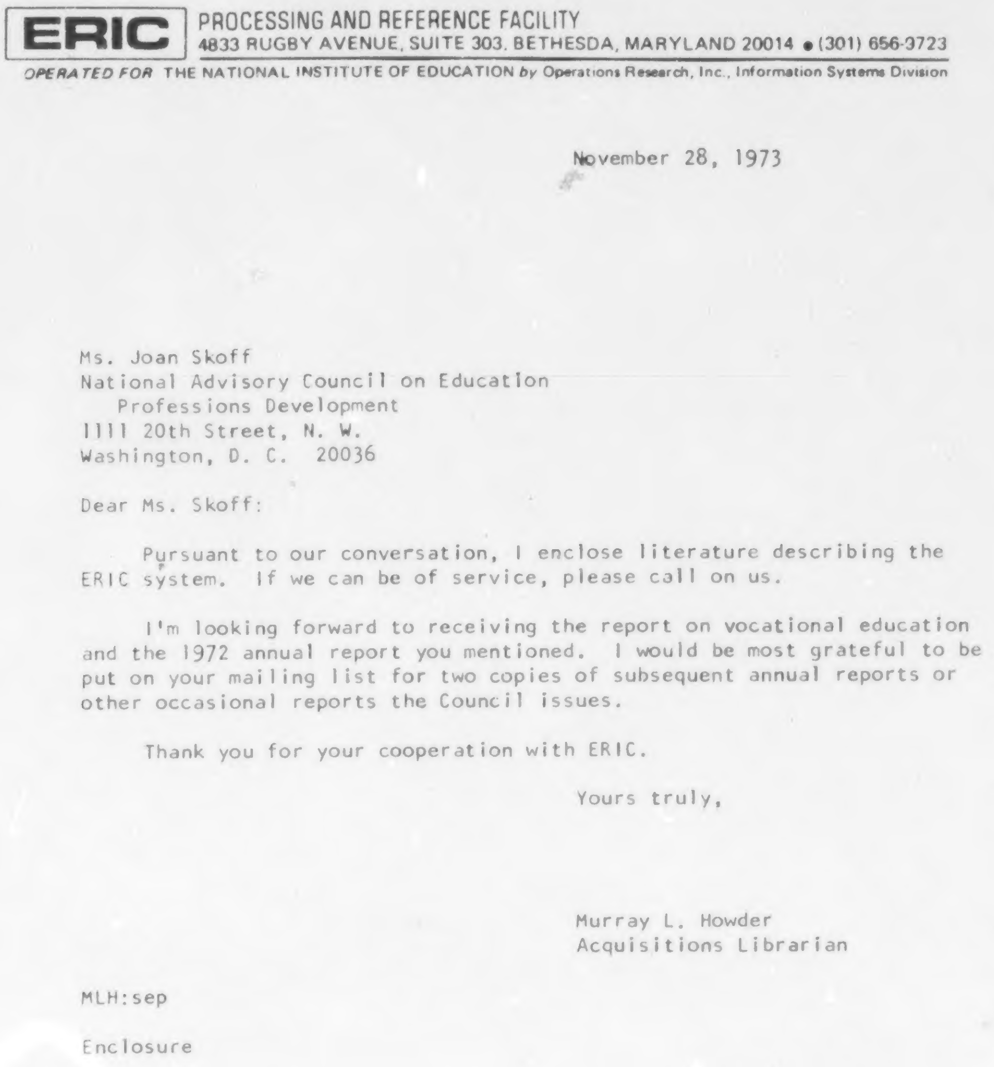
If I can be of further assistance, please do not hesitate to contact me.

Yours truly,

Murray L. Howder
Acquisitions Librarian

MLH:sep

FIGURE 2-17A
LETTERS RESPONDING TO OUTSIDE INQUIRIES
(AND TAKING OPPORTUNITY TO REQUEST DOCUMENTS)



ERIC PROCESSING AND REFERENCE FACILITY
4833 RUGBY AVENUE, SUITE 303. BETHESDA, MARYLAND 20014 • (301) 656-3723
OPERATED FOR THE NATIONAL INSTITUTE OF EDUCATION *by* Operations Research, Inc., Information Systems Division

November 28, 1973

Ms. Joan Skoff
National Advisory Council on Education
Professions Development
1111 20th Street, N. W.
Washington, D. C. 20036

Dear Ms. Skoff:

Pursuant to our conversation, I enclose literature describing the ERIC system. If we can be of service, please call on us.

I'm looking forward to receiving the report on vocational education and the 1972 annual report you mentioned. I would be most grateful to be put on your mailing list for two copies of subsequent annual reports or other occasional reports the Council issues.

Thank you for your cooperation with ERIC.

Yours truly,

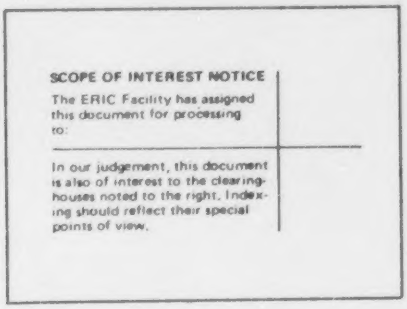
Murray L. Howder
Acquisitions Librarian

MLH:sep

Enclosure

FIGURE 2-17B
LETTERS RESPONDING TO OUTSIDE INQUIRIES
(AND TAKING OPPORTUNITY TO REQUEST DOCUMENTS)

When a document overlaps the scope of two or more Clearinghouses, the Facility assigns the document to the Clearinghouse with, in its judgment, the strongest claim to jurisdiction over the subject matter of the document. However, a copy of the Title Page is transmitted to the other interested Clearinghouses, together with a sticker (Figure 2-18) indicating where the basic assignment was made. The sticker serves to alert those Clearinghouses that might like to question the assignment; it also tells the Clearinghouse receiving the document that care should be taken in indexing to reflect the interests of the related Clearinghouses. (See Section 4.2.6 for procedural details.)



SCOPE OF INTEREST NOTICE

The ERIC Facility has assigned this document for processing to:

In our judgement, this document is also of interest to the clearinghouses noted to the right. Indexing should reflect their special points of view.

FIGURE 2-18
SCOPE OVERLAP STICKER

2.5.4 Reporting to Central ERIC

Regular narrative and statistical reports are provided on schedule by the Facility to Central ERIC. The major statistics of interest are cumulated quarterly and again annually in an "ERIC Facility Acquisitions Summary Report". (See Figure 2-19.) This report provides data by individual document sources and is submitted with an interpretive narrative. Other special reports on particular questions (such as duplicate documents) are prepared as requested or needed.

ERIC FACILITY
ACQUISITIONS SUMMARY REPORT – FY 1973

SHEET 1

SOURCE	SYMBOL	1st Q. Jul-Sep	2nd Q. Oct-Dec	3rd Q. Jan-Mar	4th Q. Apr-Jun	Total
Office of Education (Detail on Sheet 2)	OE	416	490	375	231	1,512
Social and Rehabilitation Service	SRS	15	10	12	44	81
Social Security Administration	SSA	-	-	2	-	2
Office of the Secretary, DHEW	OS	9	24	14	32	79
Public Health Service (Inc. FDA, NIH, etc.)	PHS	60	26	49	35	170
Other DHEW	DHEW	8	1	6	1	16
National Institute of Education	NIE	1	8	43	82	134
Health, Ed. & Welfare-SUBTOTAL		509	559	501	425	1,994
Action	ACT	2	1	3	3	9
Atomic Energy Commission	AEC	2	-	3	-	5
Department of Agriculture	AGR	43	15	29	72	159
Civil Service Commission	CSC	19	15	8	4	46
Department of Commerce	COM	32	19	14	44	109
Commission on Civil Rights	CCR	2	1	6	5	14
Congress	CONG	52	16	48	35	151
Department of Defense	DOD	157	81	81	84	403
Environmental Protection Agency	EPA	21	2	3	2	28
Equal Employment Opportunity Commission	EEOC	-	-	-	1	1
General Accounting Office	GAO	7	3	2	7	19
Department of Housing and Urban Development	HUD	5	4	11	5	25
Department of the Interior	INT	12	2	7	6	27
Department of Justice	JUS	8	6	10	3	27
Department of Labor	LAB	92	192	87	82	453
Library of Congress	LC	26	6	3	6	41
National Aeronautics and Space Administration	NASA	6	2	2	6	16
National Academy of Sciences	NAS	1	3	1	-	5
National Science Foundation	NSF	21	8	6	7	42
Office of Economic Opportunity	OEO	6	2	5	6	19
United States Postal Service	PO	1	1	7	-	9
Office of the President	PRES	8	10	5	15	38
Department of State	STATE	33	13	8	18	72
Department of Transportation	DOT	27	20	35	11	93
Department of the Treasury	TREAS	13	2	9	-	24
Veterans Administration	VA	11	13	1	17	42
Federal Communications Com.	FCC	3	1	-	-	4
Natl Endowment-Humanities	NEH	-	-	-	-	-
Small Business Admin.	SBA	1	-	-	1	2
General Services Admin.	GSA	1	-	-	1	2
Smithsonian Institution	SI	-	1	3	-	4
Supreme Court	SC			2	2	4
Advisory Commission on Inter-governmental Relations	ACIR			1	-	1
Other Federal Government		4	-	9	1	14
Federal Government – TOTAL		1,125	998	910	869	3,902
Non Federal Sources (Detail on Sheet 2)		378	572	769	903	2,622
GRAND TOTAL		1,503	1,570	1,679	1,772	6,524

FIGURE 2-19
ERIC FACILITY ACQUISITIONS SUMMARY REPORT (BY SOURCE)

ERIC FACILITY
ACQUISITIONS SUMMARY REPORT -- FY 1973

SHEET 2

SOURCE	SYMBOL	1st Q. Jul-Sep	2nd Q Oct.Dec	3rd Q. Jan-Mar	4th Q. Apr-Jun	Total
Bureau Adult, Vocational and Technical Education	BAVTE	1	2	5	1	9
Bureau Education for the Handicapped	BEH	13	13	23	9	58
Bureau Educational Personnel Development	BEPD/NCIES	18	3	6	35	62
Bureau Elementary and Secondary Education	BESE	42	6	24	3	75
Bureau Higher Education	BHE	83	2	3	4	92
Bureau Libraries and Educational Technology	BLET/BLLR	4	9	15	3	31
Institute of International Studies	IIS	9	28	18	13	68
National Center for Educational Communication	NCEC	6	26	4	18	54
National Center for Educational Res. and Devel.	NCERD	214	368	247	113	942
National Center for Educational Statistics	NCES	7	3	12	16	38
Office of the Commissioner of Education	OC	11	15	4	5	35
Office of Deputy Commissioner for Management	DCM	-	-	-	-	-
Office of Program Planning and Evaluation	PPE	4	9	7	2	22
Nat'l Ctr. Ed. Tech.	NCET	2	-	1	-	3
Office of Deputy Commissioner for External Rels.	DCER	-	4	-	-	4
Deputy Commissioner for School Systems	DCSS			1	-	1
Deputy Commissioner for Development	DCD	-	-	-	1	1
Office of Education - Other		2	2	5	8	17
Office of Education – SUBTOTAL		416	490	375	231	1,512
Academic Institutions	AI	27	33	22	53	135
Commercial Organizations (All Types)	CO	6	4	36	19	65
Foreign Organizations (All Types)	FOR	60	33	55	37	185
International Organizations (UN, FID, etc.)	IO	82	28	77	88	275
Local Jurisdictions (City, County, etc.)	LJ	6	169	12	23	210
Non-Profit Organizations	NPO	113	77	286	454	930
State Governments (Inc. D.C.)	SG	67	156	140	118	481
Nat'l Education Assn.		17	72	141	111	341
Other Non-Federal Sources		-	-	-	-	-
Non-Federal Sources – TOTAL		378	572	769	903	2,622

FIGURE 2-19
Sheet 2

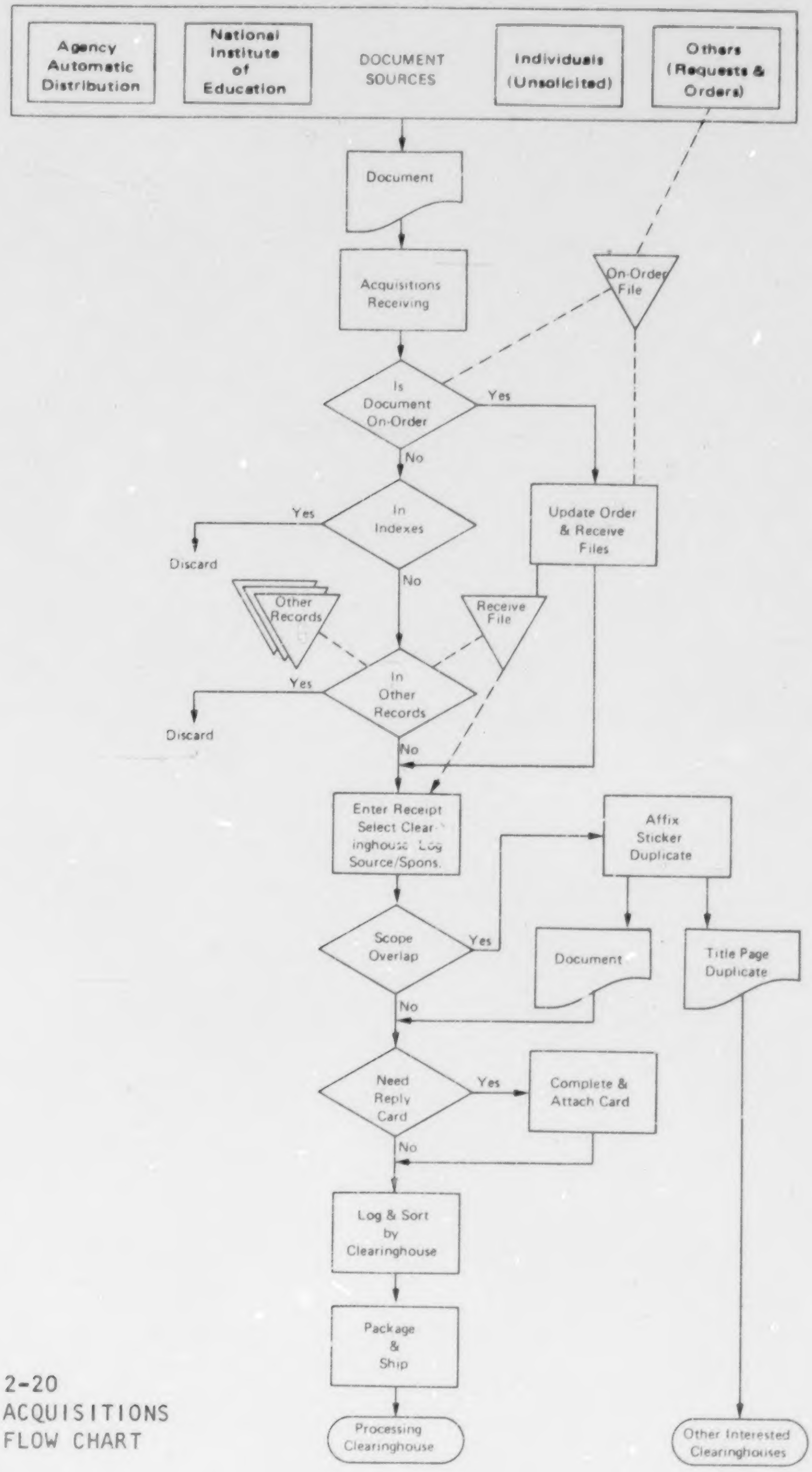


FIGURE 2-20
ERIC FACILITY ACQUISITIONS
OPERATIONS - FLOW CHART

SECTION OUTLINE

PAGE

3.1 INTRODUCTION 81

3.2 SCOPE OF INTEREST (SUBJECT MATTER) 82

3.3 TYPES OF DOCUMENTS 86

  3.3.1 Most Suitable 86

  3.3.2 Acceptable 87

  3.3.3 Unsuitable 89

3.4 QUALITY OF CONTENT 89

  3.4.1 Contribution to Knowledge; Significance 89

  3.4.2 Relevance 90

  3.4.3 New Applications of Knowledge; Innovative Practices 90

  3.4.4 Effectiveness of Presentation; Thoroughness of Reporting 91

  3.4.5 Relation to Current Priorities 92

  3.4.6 Timeliness 92

  3.4.7 Authority of Author, Source, or Sponsor 93

  3.4.8 Audience; Comprehensiveness 93

3.5 LEGIBILITY AND REPRODUCIBILITY 94

  3.5.1 General 94

  3.5.2 Physical Characteristics of Documents Which Present Reproduction Problems 94

    1. Type Size 94
    2. Broken Type/Faint Type/Smudged Type 95

PAGE

3. Colored Papers or Inks 96
4. Translucent Paper 96
5. Photographs 96
6. Handwritten Documents (Holographs) 97
7. Missing Pages/Pagination Problems 97
8. Undersize Pages 97
9. Oversize Pages 97

3.5.3 Remedial Action 98

3.6 AVAILABILITY 100

FIGURES

PAGE

3-1 Evaluation Guidelines (Sample from RC Clearinghouse) 83

3-2 Document Evaluation Forms

A. Narrative Type (Sample From RC Clearinghouse) 84

B. Check-off Type (Sample From SP Clearinghouse) 85

SELECTION

Summary of Significant Rules

1. All documents selected for announcement in RIE and inclusion in the ERIC data base must have a demonstrable connection with and relevance to the field of education, and to the areas covered by the various ERIC Clearinghouses.

2. Documents acquired anywhere in the system are transmitted on the basis of subject matter to the appropriate ERIC Clearinghouse for processing. Topics not previously included in Clearinghouse scope of interest statement must be allocated as they arise. Scope of interest statements must be constantly revised in order to include any new topics assigned to Clearinghouses.

3. At least one subject-matter specialist (and preferably more) should be involved in the selection process at each Clearinghouse.

4. Quality is the single most important selection criterion. Quality is a composite factor made up of several more specific characteristics, e.g., contribution to knowledge, significance, relevance, newness/innovativeness, effectiveness and thoroughness of presentation, relation to current priorities, timeliness, authority of author, size of audience, etc.

5. Document types have been sorted into three groups: most suitable (for RIE), acceptable (if exemplary), unsuitable. To be selected for RIE, documents must be one of the first two types. For example, research reports are "most suitable"; dissertations are "acceptable", non-print materials are "unsuitable".

6. To be selected for RIE, documents must be legible and reproducible. If a document has defective pages, they must either be corrected, or judged not to seriously affect the content of the document, before that document can be selected.

7. Documents that are selected for RIE even though they contain physically illegible or non-reproducible pages (or parts of pages) must bear the legend "BEST COPY AVAILABLE".

8. All documents selected for RIE must be available either from EDRS or from an outside source whose name and address can be cited. Documents that cannot be made available to users should not be selected and announced in RIE.

3.1 INTRODUCTION

Documents acquired as candidates for possible announcement in RIE must be subjected to a set of rigorous selection criteria to determine their proper disposition. Although in many cases the documents were originally acquired selectively, the decisions made by acquisitions staff are in the absence of the actual document, necessarily preliminary to the final selection process. It is the objective of this section to establish standards for judging a document in hand as to the following factors:

- appropriateness of content (to the field of education/ scope of Clearinghouses)
- suitability of presentation, format, medium, document type
- quality of content
- legibility and reproducibility (physical characteristics)
- availability

A document meeting the criteria in each of these five areas would be selected for processing and eventual announcement in RIE. A document not meeting the criteria would either be discarded or retained for local collection use.

Failure to satisfy criteria in any one of the areas may be grounds for rejection. Nevertheless, so important to ERIC is the quality of the permanent data base formed from these documents that "Quality of Content" should be regarded as the most important area. A document may satisfy all other criteria but if the quality is not sufficient it should be rejected. Conversely, a very high quality document may lead selection personnel to override certain problems in the legibility, availability, or document type areas, that would otherwise be considered more objectionable.

Throughout the selection process, the broad range of RIE's audience and the potential users of ERIC materials should be kept always in mind. These varied groups encompass many levels of sophistication and represent many different viewpoints. The groups include:

- educational practitioners
    - teachers, trainers, therapists, etc.
- administrators
    - principals, superintendents, deans, etc.
- policy makers
    - legislators, community leaders, school board members, etc.
- program planners
- researchers and scholars
- information specialists and librarians
- students (at all levels)

The selection process may be performed by Clearinghouse staff, Clearinghouse Advisory Board members, or specialists engaged from the field to make evaluations and decisions. A multi-person screening committee may be used and is highly recommended. In any case, at least one of the screeners employed should be a subject-matter specialist. Useful recommendations may also be found in reviews and commentary in published sources or other documents.

Written guidelines (See Figure 3-1 for example), and an evaluation form (See Figure 3-2 for example), on which to record recommendations should be provided all selection personnel. Selectors should also be made thoroughly familiar with the ERIC data base, the ERIC indexing vocabulary, and the mandated scope of interest of the Clearinghouse involved. All selectors should, of course, maintain an on-going awareness of important developments in the particular sector of the field of education covered by their Clearinghouse.

The selection of journal articles for announcement in CIJE is subject to somewhat different rules than those for documents because of the interest in covering certain journals comprehensively rather than selectively. See Section 9.2 for these details.

3.2 SCOPE OF INTEREST (SUBJECT MATTER)

Documents must pertain in some way to the field of education (and in particular to the areas covered by the Clearinghouses) in order to be considered for selection for RIE. In the ERIC system, education is subdivided into major areas and a Clearinghouse is put in charge of each. The scope of each Clearinghouse is separately defined--the best definition available of the overall field of education is, therefore, the combination of the Clearinghouse scope of interest statements. (The ERIC Clearinghouse Scope of Interest Guide, containing these statements, appears as Appendix C).

ERIC RCS

ERIC/RCS Clearinghouse wishes to abstract and enter into the ERIC system only documents that are current, appropriate, and significant. A document is current if is has been published in the last three years; ordinarily, only current documents will be forwarded to evaluators. A document is appropriate when it (1) falls within the scope of the Clearinghouse (a scope statement is enclosed), and (2) when it is not strictly a textbook. Usually, ERIC/RCS staff can judge whether a particular document is appropriate or not, so evaluators should rarely receive inappropriate documents.

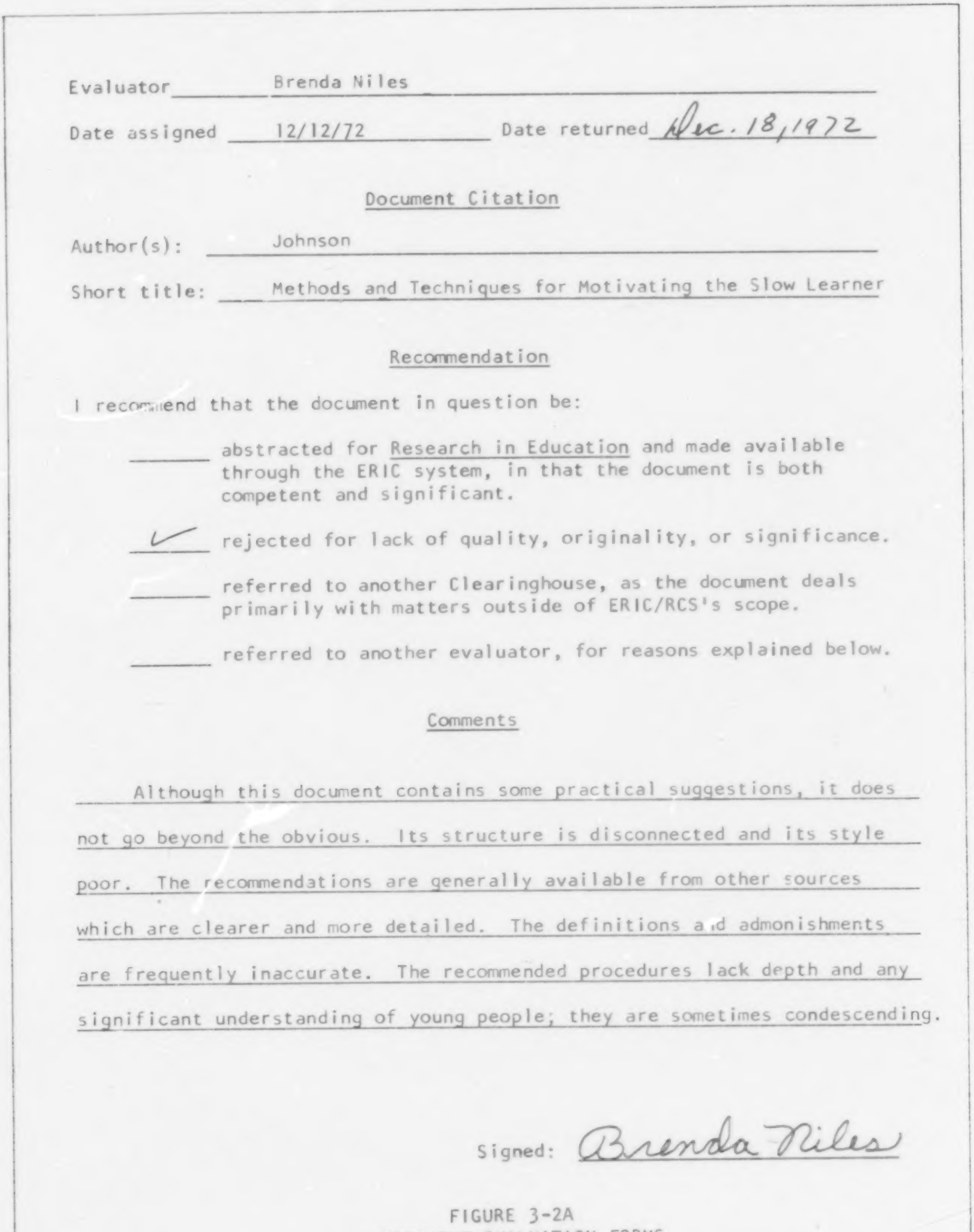
A document is significant if it meets one or more of the following criteria and if, at the same time, it is up to professional standards of clarity, logic, literacy, and (where it applies) sound research methodology.

1. Does the document contain something new, a contribution to knowledge in the field?
2. Does the document contain matter of direct or practical use to a teacher, supervisor, researcher or administrator?
3. Does the document contain information or ideas that clarify problems or suggest solutions to important problems in the field.

As a rough rule of thumb, it is probably better to err on the side of severity when the document in question is from a source providing nationwide distribution, but to err on the side of leniency when the document in question is an unpublished paper or a paper published by a source having only local or regional distribution.

The mechanics of evaluation are simple. Periodically, a document will be forwarded to you, accompanied by an evaluation form (sample enclosed) and a stamped return envelope. On the evaluation form you are to check one of the four recommendations provided for. Space is also provided on the evaluation form for a brief statement of the reasons for your recommendation. This statement is an essential part of the evaluation process, for ERIC must often explain why a particular document was entered or not entered in the system, and we keep completed evaluation forms on file so that we may answer such queries.

FIGURE 3-1
EVALUATION GUIDELINES (SAMPLE FROM CS CLEARINGHOUSE)



Evaluator Brenda Niles

Date assigned 12/12/72 Date returned Dec. 18, 1972

Document Citation

Author(s): Johnson

Short title: Methods and Techniques for Motivating the Slow Learner

Recommendation

I recommend that the document in question be:

- ____ abstracted for Research in Education and made available through the ERIC system, in that the document is both competent and significant.
- ✓ rejected for lack of quality, originality, or significance.
- ____ referred to another Clearinghouse, as the document deals primarily with matters outside of ERIC/RCS's scope.
- ____ referred to another evaluator, for reasons explained below.

Comments

Although this document contains some practical suggestions, it does not go beyond the obvious. Its structure is disconnected and its style poor. The recommendations are generally available from other sources which are clearer and more detailed. The definitions and admonishments are frequently inaccurate. The recommended procedures lack depth and any significant understanding of young people; they are sometimes condescending.

Signed: Brenda Niles

FIGURE 3-2A
DOCUMENT EVALUATION FORMS
A. NARRATIVE TYPE (SAMPLE FROM CS CLEARINGHOUSE)

Title: Author:

	High				Low
1. Reproducibility of print	5	4	3	2	1
Reproducibility of illustrations	5	4	3	2	1
2. Copyright release - required ( ), not required ( )					
3. Age of document - 1973, 1972, 1971, 1970, other...					
4. Style and clarity	5	4	3	2	1
5. Relevance of document:					
a) Is topic of current concern?	5	4	3	2	1
b) freshness of approach	5	4	3	2	1
c) variety of viewpoints	5	4	3	2	1
d) generalizable conclusions	5	4	3	2	1
6. Audience appeal:					
a) general rating					
b) practitioners					
- elementary/secondary	5	4	3	2	1
- college	5	4	3	2	1
- cooperating teachers	5	4	3	2	1
- paraprofessionals	5	4	3	2	1
- other	5	4	3	2	1
7. Document type:					
a) research data	5	4	3	2	1
b) program descriptions	5	4	3	2	1
c) discussions of current issues	5	4	3	2	1
d) putting theory into practice	5	4	3	2	1
e) new trends - theoretical	5	4	3	2	1
f) new trends - implemented	5	4	3	2	1
g) other	5	4	3	2	1
8. General rating	5	4	3	2	1

FIGURE 3-2B
DOCUMENT EVALUATION FORMS
B. CHECK-OFF TYPE (SAMPLE FROM SP CLEARINGHOUSE)

Most documents that are education-related fall unambiguously within the scope of single Clearinghouses. When a document overlaps the scope of two or more Clearinghouses, the Clearinghouses involved must negotiate to determine which one will most appropriately process and input the material. (See Section 4.2.6). When one Clearinghouse finds itself in possession of a document which falls within the scope of another Clearinghouse, the document should be transferred promptly and directly to the appropriate Clearinghouse. Documents that are extremely broad or basic in their coverage (e.g., "Education in the World Today") tend to be assigned to the broader, non-subject-oriented Clearinghouses, e.g., Educational Management, Higher Education, Rural Education. Specialized subject matter areas not specifically included in existing scope of interest statements (e.g., "aesthetic education") are generally assigned via negotiation and general agreement to the most likely Clearinghouse and the subject matter area added to the scope of interest statement at the next revision. The intent is for the network of ERIC Clearinghouses to provide an "umbrella" encompassing the entire field of education, including new emphases, directions, and innovations.

3.3 TYPES OF DOCUMENTS

To aid in selecting documents appropriate for RIE, the many different document types have been subdivided into "most suitable", "acceptable", and "unsuitable" categories.

3.3.1 Most Suitable

- Research and Technical Reports (experimental, basic, applied)
- Evaluation and Study Reports
- Surveys and Statistical Reports
- Descriptions
    - Model Programs/Projects/Installations
    - Innovative Practices
    - Product Development (R&D)
    - Implementation and Dissemination Reports
- State-of-the-Art Papers/Reviews
- Syntheses/Interpretations/Summaries
- Bibliographies, Discographies, Filmographies (preferably annotated)
- Conference Proceedings and Papers
- Speeches and Presentations
- Congressional Hearings/Reports/Documents
- Position Papers
- Guidelines

  - Practical "How To" Guides
  - Teacher Guides
  - Curriculum Guides

- Tests, Measurement/Evaluation Instruments

All Clearinghouse products are to be classed as "most suitable" and put into RIE, with the following exceptions:

  - products which are published in journals (including offprints/reprints of these products)

  - short, informal, on-demand bibliographies

All serial publications and journal articles are generally regarded as appropriate for CIJE and not RIE (see Section 3.9); however, the following exceptions are permitted:

- journal issues with a single overall theme so that the issue constitutes, in effect, monographic treatment of the theme.

- conference proceedings (e.g., technical proceedings of annual meetings).

- yearbooks

- serials of highly irregular publication or limited circulation, so that the issue constitutes, in effect, a unique item.

It is intended that RIE should maintain good coverage of documents of Federal, state, and local education agencies, and those should be given special attention.

3.3.2 Acceptable

The following types of materials should be selected only when they appear to have wide applicability or when they are exemplary products:

- Standards and Regulations
- Annual Reports
- Fiscal Reports (must contain some substantive information)
- Personnel Policies, Recruitment Materials, Employment Agreements

- Data Collection or Survey Instruments (by themselves)
- Books (commercial publications)
- Manuals
- Directories (current only)
- Newsletters and Bulletins (from professional and other organizations)
- Dissertations and Theses

Special Note on Dissertations and Theses

The majority of domestic doctoral dissertations are well controlled by and announced in University Microfilms' Dissertation Abstracts. It is possible, therefore, to be very selective about dissertations that are candidates for RIE; the following additional criteria can be applied.

- the university granting the degree does not participate in Dissertation Abstracts, e.g., University of Chicago, Massachusetts Institute of Technology.

- the dissertation is especially important to the area of education covered by the Clearinghouse and would definitely enhance the ERIC data base.

Dissertations that are in (or going in) Dissertation Abstracts, and that are also selected for RIE, should be entered at Level II (microfiche only), with an appropriate Reproduction Release (from University Microfilms) affixed to the document, and a reference, in the Availability Field, to University Microfilms as the source for Hard Copy.

Dissertations that are not in (and not going in) Dissertation Abstracts, and that are selected for RIE, should be entered at Level I, with an appropriate Reproduction Release (from the author) affixed to the document.

Masters theses are controlled and announced, on a more limited basis, via University Microfilms' Masters Abstracts. Since participants in this program are considerably fewer in number than those engaging in Dissertation Abstracts, there is no need for ERIC to apply additional restrictive selection criteria for such items. Masters theses and research papers from fifth-year programs may be considered for RIE at Level I (or Level II when announced in Masters Abstracts and available from University Microfilms) using the standard ERIC criteria.

In summary, comprehensive acquisitions of doctoral dissertations and masters theses is not expected of the Clearinghouses, but such items are acceptable when they meet the above criteria.

3.3.3 Unsuitable

- Journal Articles (See Section 3.3.1)
- Non-Print Materials
- Fiscal Reports (with no substantive information)
- Catalogs (Commercial, curriculum)
- Proposals
- Advertising and Promotional Materials
- Broadsides, Posters

3.4 QUALITY OF CONTENT

Documents selected for RIE should be of high quality, substance, and significance. The following characteristics all contribute to that elusive and subjective, but most important factor, "quality". While every document should be examined for these desirable characteristics, not every document can be expected to manifest all features.

3.4.1 Contribution to Knowledge; Significance

Substantive contributions to knowledge should always be selected for RIE, especially when based on well-designed experiments or orderly collections of data. Research reports, in particular, should be examined in terms of: stated objectives, hypotheses tested, methodology, conclusions and recommendations. In order to determine educational significance, subject experts should be consulted whenever necessary.

Works by the same author, or coming out of the same program, should be examined to determine if there are any significant new developments, data, or results being reported. It should be kept in mind that negative results may be as contributory as positive results. Likewise, evidence which challenges or contradicts existing knowledge or common opinion can be as useful, or more so, as that which conforms or merely extends what is already known.

The contribution or significance of a document may also be assessed in terms of its purpose. Documents may have large and important objectives where a small amount of new information may have a disproportionately large effect. They may also have very modest objectives, attempting to place one small brick in a very large foundation or structure, the outlines of which are just beginning to emerge.

Papers prepared for learned societies or other special interest groups (e.g., professional organizations) often reflect the moving edge of new research and explorations not yet reduced to formal exposition for purposes of publication.

Documents which the selector believes add to or enhance the knowledge base of the field, or which provide an impetus for further research or action, should be selected for RIE.

3.4.2 Relevance

Relevance in this context is defined as the extent to which the document deals with issues that are current, "alive", and of contemporary interest to the educational community.

- Are emerging professional interests and topics treated, e.g., work education, sex education, metric system conversion, etc.?
- Does the document present work on the "frontier" knowledge area of a particular subject, e.g., environmental studies, energy sciences?
- Are answers offered to current social problems?
- Does the document provide basic up-to-date and comprehensive background or reference information on a subject?
- Has inclusion of the document been indicated by leadership interest or request?
- Does the document deal with future trends?

3.4.3 New Applications of Knowledge; Innovative Practices

There is always a need for documents which describe the application of tested or known methods to new areas or new problems. The selector might ask the following questions:

- Does the document present an older idea, treatment, or application in a new framework or from a new point of view?
- Does the document present a new idea, treatment, or application (perhaps in relation to an older problem)?
- Does the document substantiate or contradict information contained in earlier work?
- Does the document suggest new areas of research?
- Does the document present new hypotheses to be tested?

3.4.4 Effectiveness of Presentation; Thoroughness of Reporting

Though it may discuss a well-known subject, a document may add value because it presents the subject with exceptional clarity, vigor, or in particularly topical terms. It may present new insights, or show the subject in a new context, or in language or form particularly suited to the understanding of the intended audience. It is a disservice to users to select documents whose content is garbled or whose form places an unnecessary burden on the reader. Documents which are poorly written, misuse the technical devices of their presentation, fail to provide sufficient information to judge or follow-up on the adequacy of their work, or offer conclusions which are not supported by their data, should be rejected.

Thoroughness of reporting refers to the extent of necessary background information provided, level of technical detail presented, and substantiation given for statements made. The following questions might be asked by a selector:

- Is the premise or thesis or purpose stated clearly?
- Are stated goals met?
- Are the arguments developed logically and reasonably supported with facts and research rather than opinion or conjecture?
- Are the procedures utilized described adequately enough to permit a later experimenter to duplicate them?
- Are data provided informatively as in tables, graphs, etc.?
- Are key bibliographic references included? Annotations?

- Are addresses given for source of materials cited?
- Is the curriculum package (if any) complete, with grade levels and objectives specified?
- Are the data evaluated (rather than just presented) or a future direction to evaluation of data outlined?
- Is the text well or adequately written, and not ambiguous, unclear, or otherwise a bar to understanding?
- How does the document compare with others on the same topic? Individualistic or redundant and derivative?
- Does the document help to integrate the literature, e.g., by synthesizing the findings from various disciplines?

3.4.5 Relation to Current Priorities

Priorities are established by the governments and institutions responsible for the conduct of education. Priorities may be established at the national, regional, state, local, or professional level.

Documents dealing with such issues should be given special consideration, expecially those dealing with priorities, goals, and objectives established by the NIE. NIE priorities identify the urgent needs in American education and the areas most requiring beneficial change and innovation.

3.4.6 Timeliness

The document should be current in terms of the work being done in the area with which it is concerned. A large number of the candidates for RIE have a value which is in inverse proportion to their age. Every Clearinghouse should, therefore, process documents as quickly as possible and should discourage backlogs.

There is no age limitation for RIE candidates. However, because timely, up-to-date information is to be preferred, a high percentage of RIE accessions have been published within the five years immediately prior to announcement. Some older documents, considered as "classics" or "landmarks", may be considered for RIE; however, they would be the exception rather than the rule. The same would hold for documents whose significance is the part they form of the historical record, e.g., the official proceedings or recommendations of a board, commission, or major organization in the field.

3.4.7 Authority of Author, Source, Sponsor

Some authors and some organizations are established leaders in their fields and have so consistently contributed to the field that virtually anything they produce merits close attention. Selectors must, however, not fall into the trap of automatically and uncritically accepting everything from such sources.

3.4.8 Audience; Comprehensiveness

The broader and larger the audience for a topic, the more justification there is for selecting a document on that topic. Documents on extremely narrow and specialized topics with correspondingly small audiences must, conversely, be strong with respect to the other criteria to warrant selection. In other words, an otherwise marginal document may be selected on the basis of the large number of people known to be interested in its topic (high user demand) whereas a marginal document with a minuscule audience is in double jeopardy.

The large and varied RIE user group makes this a difficult criterion to apply. In addition, the stated ERIC objective of providing coverage for the entire field of education argues for a comprehensive approach that leaves no topic totally unrepresented in the data base.

The selector must therefore strive to maintain a broad view, partial to no particular segment of the user group, and permitting the selection of documents potentially useful to any segment.

3.5 LEGIBILITY AND REPRODUCIBILITY

3.5.1 General

All Level I and II documents announced in RIE are converted into microfiche which are disseminated to users on both a subscription and a demand basis. Level I documents are also made available to the public in paper copy (hard copy) reproduced from the microfiche. All such reproduction work is performed by the ERIC Document Reproduction Service (EDRS) using the original documents collected by the Clearinghouses and forwarded to the ERIC Facility.

EDRS performs its work according to Government standards* and is contractually obligated to adhere to these standards in all cases. Any exceptions must be specifically granted by Central ERIC. Clearinghouse personnel engaged in screening documents should obtain copies of these Government standards and should make themselves familiar with their provisions.

The intent of this section is to describe the physical qualities that a document must have in order to be photographically reproduced onto microfiche and then hard copy. Since it is easier to state what can't be filmed rather than what can be filmed, the approach taken here will be to outline those physical characteristics which, if present, make a document illegible or non-reproducible. Documents falling into this class should be rejected. It is a disservice to inform the user of a document which he may pay to obtain and then cannot read adequately.

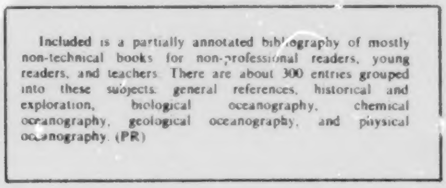
3.5.2 Physical Characteristics of Documents Which Present Reproduction Problems

1. Type Size

Type size below 6-point can generally not be reproduced satisfactorily; 6-point type is difficult to read for any length of time or amount of material, even in a good quality original. To start with smaller than 6-point, and to go through further generations of reproduction, is to generally degrade the material to the extent that it is unsatisfactory to the user. Material already reduced in the original document is particularly prone to falling below 6-point size and must be carefully examined.

---

*Basic U. S. Government Micrographic Standards and Specifications, National Microfilm Association, January 1972.



Included is a partially annotated bibliography of mostly non-technical books for non-professional readers, young readers, and teachers. There are about 300 entries grouped into these subjects: general references, historical and exploration, biological oceanography, chemical oceanography, geological oceanography, and physical oceanography. (PR)

6-Point Type

2. Broken Type/Faint Type/Smudged Type

Broken type is the consistent dropping of portions of the characters, e.g., the left side, the descenders, the top, etc. Keying or printing equipment out of adjustment is what generally causes broken type. While the broken type original may sometimes be readable because of the faint impression or "suggestion" on the paper of the missing lines, these traces are generally lost in filming and the text in the resultant copy can be of marginal readability to the user.

Faint or weak type can be the result of various factors ranging from an old typewriter ribbon with little ink remaining to a poor printing job. Faint type may be sporadic in occurrence. The reproducibility of faint type can often be tested by attempting to photocopy (e.g., Xerox) the original. If there is a firm enough image to derive a readable copy on an office photocopier, then the chances are the document can be filmed adequately. If the copy is too poor, however, the document should be considered not-reproducible.

Smudged type has either had the original character images spread or dispersed around themselves, thereby confusing their nature, or it is the victim of an overprinting of other characters.

3. Colored Paper or Inks

Colored paper or inks do not, of course, reproduce in their original color, and they do affect the quality of the black and while film image. Documents depending on color to transmit meaning (e.g., a document portraying colored spectrum lines, paint samples, textile swatches, different colored graph lines, anthropological skin color description standards, etc.) are better entered as Level III, if possible, with the user referred to a source of availability of an original copy.

Documents printed via diazo and spirit duplicator techniques (e.g., Ozalid-blue-line process, Ditto, etc.), or in colored inks (e.g., blue, green, yellow, orange), should be subjected to a test on an office photocopier machine to see if the print will reproduce. Black ink on an especially dark paper background (e.g., dark red background), or tone-on-tone printing, should also be tested.

Material that depends on gradations of shading, such as some types of bar graphs, will not generally reproduce so that the same differentiations can be made as in the original.

4. Translucent Paper

Documents printed on translucent paper, such as a thin onion skin, are not a problem unless there is print on both sides and both sides tend to "bleed" (i.e., to be seen simultaneously) and thereby interfere with each other.

5. Photographs

Photographs will not copy well unless especially screened at time of filming. Photographs that are underexposed or very stark or simple in their content will sometimes reproduce reasonably well. Documents that depend largely on photographs to convey their message are better entered as Level III, with the user referred to a source of availability of [illegible] original copy.

6. Handwritten Documents (Holographs)

Handwriting is more prevalent in educational documents than one might imagine. It rarely reproduces well because of the variability of the impression. In addition, most handwriting is highly idiosyncratic and takes on the properties of shorthand (i.e., characters are slurred, elided, or left out). Handwritten documents, or documents containing substantial handwritten material, should be avoided whenever possible.

7. Missing Pages/Pagination Problems

Every document selected for RIE must be checked not only to determine its correct pagination, but also to verify that there are no missing pages and that the pages that are there are in the proper sequence. Documents with pages out of sequence must be corrected before being transmitted to the Facility. Documents with missing pages should generally not be selected for RIE. An attempt should first be made to secure the missing pages and to insert them where they belong. Only if it can be demonstrated that the missing pages are not essential may the document be selected for RIE; in such cases the missing pages must be noted in the Descriptive Note and the document must be stamped "BEST COPY AVAILABLE".

8. Undersize Pages

Undersize pages, e.g., 3"x5", 4"x6", 6"x9", etc. are not a filming problem as long as the text they contain is clear, legible, and no smaller than 6-point.

9. Oversize Pages

The ideal page size is 8½"x11", standard letter size. If the document pages are larger than 8½"x11":

- Pages up to 20" in height on which the printed copy exceeds 10½" in height must be counted as two pages.

- Pages up to 15" in width on which the printed copy exceeds 8" in width must be counted as two pages.

- Pages, as above, which exceed the limits of both height and width must be counted as four pages.

Foldouts (pages larger than the basic document pages) should be measured, and the measurements divided by 8" in the horizontal dimension and 10" in the vertical dimension (if larger than 11"). The results when rounded to the next highest whole number and multiplied together will give the microfilm frames required to film the sheet.

Pages or foldouts which must be counted as more than one microfiche frame are filmed with an overlap, i.e., the first frame picks up the left or top of the page; the second frame picks up the right or bottom of the page, both frames contain some common material from the middle of the page. (See also Section 5.3.17.)

If a document is 11" x 8½", with the text running with the long dimension, filming is done in accordance with the binding. Such a document is considered over 8½" in width and each page becomes two frames. (Most user installations do not have microfiche viewers that would permit them to re-orient the viewplate correctly). However, if a regular 8½" x 11" document contains only occasional pages or tables where the text is arranged bottom to top (along the long dimension) these pages are filmed with the others, in accordance with the binding; each page is considered a regular 8½" x 11" page and becomes one film frame.

As can be seen, oversize documents can be handled, but at the expense of some potential confusion to the user on the resultant microfiche. Oversize material is only rarely a deterrent to selection.

3.5.3 Remedial Actions

The mere presence in the document of one of the above undesirable physical characteristics is not sufficient to prevent selection. The physical problem must exist to an extent that materially affects the document. There are three possibilities:

1. The physical problem affects the document only slightly and need not be corrected.

   In this case the document may be selected for RIE. The problem may be noted in the Descriptive Note if desired, but this is not required except in the case of missing material. Examples of this type of problem might be: small type interspersed internally on a few pages or tables, a photograph or two, a few pages with broken or otherwise poor type, a missing and unobtainable but non-essential section or appendix (should be noted in the Descriptive Note).

2. The physical problem has a substantial effect on the document, but it can be corrected by the Clearinghouse itself.

   In this case the document should have the defect corrected if it is selected for RIE. Examples might be: illegible pages that can be re-typed, a graph dependent on color that can be re-labelled so as to be independent of color, material in excessively small type that can be re-typed, or even perhaps omitted without detriment to the document, out-of-sequence material that can be re-sequenced. Major amounts of re-typing should be avoided, however.

3. The physical problem has a substantial effect on the document and requires going back to the source for remedial action.

   In this case, the Clearinghouse should work with the source to correct the defect if possible. Examples might be: extensive missing pages, extensive material reduced below 6-point size, extensive illegible pages. In some cases, sources have been willing to make available the original camera-ready copy in order to see that their document makes it into the ERIC system.

As a general rule, a document that is substantially physically defective should not be selected "as is" for RIE. Rare exceptions may occasionally be made in the case of unusually important and high quality documents that simply cannot be corrected, e.g., the author is deceased; the source organization no longer exists; no other copies exist, etc. Whatever the reason, if a physically defective document is selected for RIE, the document cover must be stamped "BEST COPY AVAILABLE" and should be entered at Level II (microfiche only). If the defect is serious, it should be noted in the Descriptive Note.

If it is not appropriate to describe the defect specifically, the following general note should be placed in the Descriptive Note Field: "Not available in hard copy due to marginal legibility of original document".

PRIORITY documents received from the ERIC Facility must be selected for RIE whatever their physical quality. PRIORITY documents are screened in advance for legibility and reproducibility before being sent to the Clearinghouses. If the document bears the stamp "BEST COPY AVAILABLE", the possible sources of better copies have been exhausted.

3.6 AVAILABILITY

Documents announced in RIE must be available either through EDRS (Level I or II) or through an outside source whose name and address can be cited in the Availability Field. ERIC does not wish to announce documents that the users cannot obtain in some way. Therefore, if a document cannot be reproduced and a source of availability cannot be found, it should not be selected for RIE.

The degree to which a document is readily available from sources other than ERIC can also affect the selection decision. ERIC recognizes a certain responsibility for the bibliographic control of fugitive materials in the field of education. If a document would probably not be available anywhere if not included in the ERIC data base, then there are stronger reasons for selecting it than there would be if it were available through regular publishing channels.

Documents which are commonly and easily available on a nationwide basis should generally be evaluated by selectors very strictly. It is unlikely that the use of such documents by the educational community depends on ERIC. They will be in many library collections and will therefore be frequently cited and readily consultable by users quite apart from any announcement in RIE. Unpublished papers and those having only local or specialized distribution should, on the other hand, be evaluated more leniently. ERIC may be the only data base that has acquired the document and the only one in a position to preserve the document for future users.

SECTION OUTLINE

PAGE

4.1 INTRODUCTION 107

4.2 FACILITY HANDLING 107

- 4.2.1 Receiving 107
- 4.2.2 Check of On-Order File 107
- 4.2.3 Establishing Title Control of In-Process Documents 107
- 4.2.4 Duplicate Checking 108
- 4.2.5 Information of Use to Document Processors 109
- 4.2.6 Assignment to Clearinghouses 111
- 4.2.7 PRIORITY Document Handling 112
- 4.2.8 ED Number Assignment 113
- 4.2.9 Transfer of Documents to EDRS 114
- 4.2.10 Reply Cards (Acknowledgments to Contributors) 114

4.3 CLEARINGHOUSE HANDLING 116

- 4.3.1 Receiving 116
- 4.3.2 Logging, Checking, and Establishing Basic Control 117
- 4.3.3 Duplicate Checking 117
- 4.3.4 Accessioning 119
- 4.3.5 Acquisitions Data Report (ADR) - Reporting Accessions 119
- 4.3.6 NIE Policy Disclaimer Label 126

PAGE

4.3.7 Reproduction Release Labels 126

4.3.8 PRIORITY Document Handling 128

4.3.9 Scope Overlap Sticker 128

4.3.10 Reply Cards (Acknowledgments to Contributors) 129

4.3.11 Inter-Clearinghouse Transfers 129

4.3.12 NIE/OE-Sponsored Reports 130

4.4 SHIPPING 130

4.4.1 Contents of Shipments 130

Clearinghouse to Facility 130
Facility to Clearinghouse 131

4.4.2 Logging Shipments of Documents/Resumes for RIE 132

4.4.3 Packing 132

4.4.4 Wrapping 134

4.4.5 Labeling and Addressing 134

4.4.6 Shipping Method 134

4.4.7 Schedule 135

4.4.8 Miscellaneous 135

EDRS Disposition of Original Documents 135

FIGURES

PAGE

4-1 Title File Card (Same card used for both On-Order and In-Process Control) 108

4-2 RIE Issue Remove List (Including Duplicates) - Example 110

4-3 Scope Overlap Sticker 112

4-4 PRIORITY Handling Form 113

4-5 Single-Frame Resume (Computer-Produced) 115

4-6 Reply Card 116

4-7 Title Page Showing Position of: 120

- Clearinghouse Accession Number
- ED Accession Number
- NIE Policy Disclaimer Label
- Reproduction Release Label
- Scope Overlap Sticker
- PRIORITY Handling Form

4-8 A&B Acquisitions Data Report - Sample Pages 123-124

- A. Personal Author Sequence 123
- B. Title Sequence 124

4-9 Acquisitions Data Input Form 125

4-10 NIE Policy Disclaimer Label 127

4-11 A&B Reproduction Release Labels 127

- A. Level I
- B. Level II

4-12 Clearinghouse Accession Log Sheet 133

HANDLING AND SHIPPING

Summary of Significant Rules

1. There are two classes of document handling: ROUTINE and PRIORITY. Documents assigned the latter class must be selected for RIE and must be processed in time to be included in the next issue of RIE that has not yet been closed. (Section 4.3.8)

2. Clearinghouses must send to the Facility, on the last working day of every month, basic author/title records for all the candidate documents acquired during that month, for use in compiling the monthly duplicate-checking tool, the Acquisitions Data Report (ADR). (Section 4.3.5)

3. The basic responsibility for duplicate checking resides with the Clearinghouses. The Facility makes a preliminary check on all documents it assigns to the Clearinghouses; it also makes a final check, just prior to publication, on all items received from Clearinghouses. (Section 4.3.3)

4. All NIE/OE-sponsored reports must be cleared by NIE/OE Project officers before being processed. Documents received from the ERIC Facility can be assumed to be cleared. Clearances for documents received directly should be sought via the ERIC Facility. (Section 4.3.12)

5. Clearinghouses are responsible for obtaining reproduction releases from copyright or proprietary rights holders and for maintaining a permanent file of all releases obtained. Documents for which releases have been obtained must reflect this via Reproduction Release Stickers affixed to their covers. (Section 4.3.7)

6. A Clearinghouse that acquires a document that falls within the range of another Clearinghouse should forward the document to the relevant Clearinghouse promptly and directly. (Section 4.3.11)

7. A Clearinghouse that is assigned a document that overlaps the interests of other Clearinghouses must be certain to index the document from the viewpoints of the other Clearinghouses as well as its own. These other Clearinghouses are indicated on the "Scope Overlap Sticker", affixed by the ERIC Facility. (Section 4.3.9)

8. All documents forwarded for inclusion in RIE must bear an NIE Policy Disclaimer Label stating that the document does not necessarily reflect official NIE policy. (Section 4.3.6)

9. Reply Cards (Acknowledgments to Contributors) are optional, and each Clearinghouse may pursue its own preferred course. However, care should be taken not to automatically send such routine "thank you" notes to inappropriate sources, e.g., a State Governor's office. Self-addressed reply cards affixed to documents by source institutions (or by the ERIC Facility for the source) should be detached and forwarded only if the document is rejected; they should be left affixed throughout processing, if the document is selected, as the Facility will later record on them the ED number before returning them to the source. (Section 4.3.10)

10. A completed "Clearinghouse Accession Log Sheet" must accompany each shipment of documents from Clearinghouses to the ERIC Facility (See Section 4.4.2)

11. All packing, wrapping, labeling, and addressing must conform to regulations and limitations recommended or imposed by the Postal Service.

12. ERIC materials shipped from Clearinghouses to the Facility via the Postal Service should be sent Certified Air Mail, unless otherwise directed. Commercial delivery companies may be used if an equivalent service is available.

13. Shipments of ERIC materials from Clearinghouses to the Facility should conform to the "ERIC Master Schedule" published at the beginning of each calendar year.

14. Clearinghouses should not request that documents submitted for announcement in RIE and filming by EDRS be returned. Filming requires that the document be taken apart, and the hard copy duplication process employed by EDRS may require continued use of the original document.

4.1 INTRODUCTION

This Section describes the procedures for handling and shipping documents intended for RIE. (Procedures for handling and shipping CIJE journals and materials are described in Section 9). After documents have been acquired, certain operations are necessary in order to make them ready for selection (Section 3), cataloging (Section 5), abstracting (Section 6), and indexing (Section 7). After processing has been completed, certain guidelines must be followed in wrapping, packing, labeling, and shipping documents from one point to another.

4.2 FACILITY HANDLING

4.2.1 Receiving

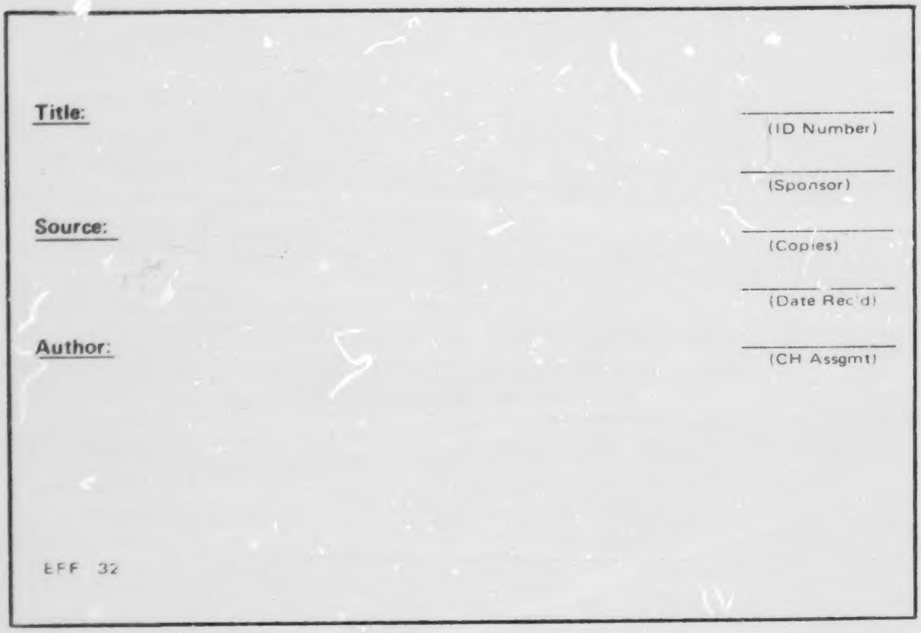
All documents sent to the Facility are routed to the Acquisitions and Document Control Department. Packages are opened and wrappings discarded unless they contain some useful identifying information not found elsewhere, e.g., sender's name and address. (See Section 4.2.5.)

4.2.2 Check of On-Order File

All documents received are first checked against the "On-Order File" to see if they have previously been the subject of a specific request. (Since documents arrive from a variety of sources, it is possible, but rare, for a received document to be found to be on-order, but not to be arriving as a result of the order.) The on-order file is purged as orders are fulfilled; the file at any one time, therefore, represents specific document requests outstanding.

4.2.3 Establishing Title Control of In-Process Documents

Title cards (See Figure 4-1) are prepared for all documents received at the Facility. The titles are transcribed in full and exactly as they appear on the document. Personal and corporate authors, report numbers, publication date, sponsoring agencies, series notes, and other identifying data are recorded, if provided. Each card also records the date the item was received, the copies received, and the disposition (See Section 4.2.6). The Title File serves as a record of all material received by the Facility. It is used to answer the questions of contributors, Clearinghouses, and Central ERIC. It is a record of all documents that have passed through the Facility on their way to the Clearinghouses. (When a document has finally completed all processing and has received an ED accession number, it will appear in the various bibliographic tools describing the ERIC Data Base, e.g., Title Index, Report/Project Number Index, Contract Number Index, etc. At that point the document ceases to be "in-process" and its entry in the In-Process Title File may eventually be purged, if desired.)



Title:

(ID Number)

(Sponsor)

Source:

(Copies)

(Date Rec'd)

Author:

(CH Assgmt)

EFF 32

FIGURE 4-1
TITLE FILE CARD
(Same card used for both On-Order and In-Process Control)

4.2.4 Duplicate Checking

The basic responsibility for ensuring that documents already in the ERIC system are not processed again lies with the Clearinghouses. The earlier it can be determined that a document is a duplicate, the greater the saving in time, money, and processing effort.

The Facility never knowingly sends a duplicate to a Clearinghouse (unless specifically requested to do so). The Facility checks its own Title File of documents it has received, the Acquisitions Data Report (a composite record of in-process items, as reported each month by all the Clearinghouses), and the formal Title Index encompassing all ED accessions/RIE announcements through the last full quarter. (Duplicates detected by the Facility are generally discarded; if the Clearinghouse needs additional copies, the documents are marked "Duplicate" before transmittal.) Nevertheless, the decentralized nature of the ERIC system and its acquisitions efforts results in the Clearinghouses receiving from various sources documents that are either already in the system or in-process at their own or other Clearinghouses. Consequently, the Clearinghouses must check their own internal records, the Acquisitions Data Report, and RIE, in an attempt to avoid duplicate processing. (See Section 4.3.3.)

Despite all checks made by both the Facility and the Clearinghouses, however, some duplicates arrive at the Facility for inclusion in RIE. Immediately prior to preparing an issue of RIE, therefore, the Facility does a duplicate check by title and author using the computer to search the ERIC Master File. This "final filter", verified manually by the editors, detects approximately 20 duplicates per issue. These documents are removed and returned to their respective Clearinghouses. A report (Figure 4-2) is prepared listing these duplicates and indicating the issue of RIE in which they were first announced. It is generally considered that duplicates of items announced three or more months prior should have been caught, whereas duplicates of items in-process, or in an RIE issue that has not yet been published, are more understandable.

4.2.5 Information of Use to Document Processors

Some documents acquired by the Facility are accompanied by information (such as copies of letters granting permission to reproduce or providing authorship, ordering, or price information), which is essential for

RIE ISSUE REMOVE LIST - RIEDEC73

A. DUPLICATES (11)

RESUBMISSION OF CLEARINGHOUSE'S OWN INPUT

CS 500 336	RIEOCT73	ED 077 043	CS 500 266

DUPLICATES APPEARING IN RIE THREE MONTHS OR MORE AGO

EM 011 074	RIEJUL73	ED 073 463	CS 200 331
EM 011 081	RIEAPR73	ED 070 650	SE 015 428
EM 011 262	RIESEP73	ED 076 304	RC 007 015
TM 003 066	RIESEP73	ED 075 911	EA 005 035

DUPLICATES APPEARING IN RIE IN OCTOBER, NOVEMBER, OR DECEMBER 1973

EA 005 359	RIEDEC73	ED 080 609	TM 003 128
EM 011 244	RIEOCT73	ED 077 467	HE 004 303
RC 007 137	RIENOV73	ED 079 557	VT 020 902
SO 005 169	RIEDEC73	ED 080 725	VT 021 052
SO 006 038	RIENOV73	ED 079 258	SP 006 656
VT 021 103	RIEDEC73	ED 080 050	HE 004 386

B. REJECTS (15)

CG 007 023	Pulled and returned to Clearinghouse.
CS 200 642	Returned as requested by Clearinghouse.
JC 730 189	Returned as requested by Clearinghouse.
SP 006 758	Returned for copyright release.
TM 003 073 - TM 003 080	Pulled and returned to Clearinghouse.
TM 003 085	Pulled and returned to Clearinghouse.
TM 003 099	Returned for reproduction release.
TM 003 137	Pulled and returned to Clearinghouse.

C. DELAYED (0)

FIGURE 4-2
RIE ISSUE REMOVE LIST (Including Duplicates) - Example

complete and accurate document description. Sometimes information such as address or author affiliation is contained on the outside wrappers and nowhere else. All such information is attached when forwarding documents to the Clearinghouses.

Certain organizations have given ERIC blanket permission for reproduction at Level I or Level II. In such cases, the Facility affixes Level I or Level II stickers to the documents, as appropriate, before transmitting to the Clearinghouses, thereby obviating any questions about reproducibility.

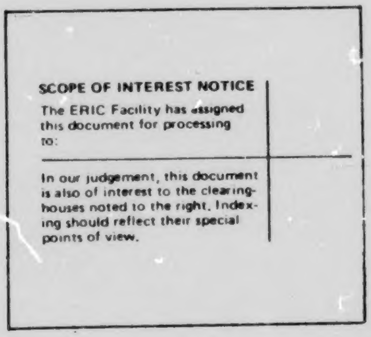
In general, the Facility sends along any information which might help the Clearinghouses identify, catalog, or otherwise process a document.

4.2.6 Assignment to Clearinghouses

Documents received by the Facility are assigned, on the basis of their subject matter, to the appropriate ERIC Clearinghouses for selection and processing (cataloging, indexing, abstracting). The ERIC Clearinghouse Scope of Interest Guide (Appendix C) is the authority used during assignment. The problems met with during assignment vary from the simple to the complex. Documents dealing with single unified topics such as "Teaching English to Sixth Graders" can be assigned quickly, correctly, and with certainty; documents dealing with multidisciplinary topics (or mixes of target populations and topics), such as "Structural Variables Affecting CAI Performance on Arithmetic Word Problems of Disadvantaged and Deaf Students", can overlap the scopes of several Clearinghouses. It may be necessary to scan the Table of Contents, Introduction, Conclusion, or even the body of such documents, to determine their major thrust.

In general the minimum time consistent with reasonable and logical assignments should be spent on this activity. If a document overlaps the scopes of two or more Clearinghouses, a Scope Overlap Sticker (Figure 4-3) is affixed to the cover. A reproduced copy of the cover bearing such a sticker is then sent to each of the alternative Clearinghouses; this action serves to alert such Clearinghouses to the fact that a document of interest to them has been assigned to another

Clearinghouse. If they wish to question the assignment, they can contact directly the "prime" Clearinghouse that received the document and negotiate who should process the document. The sticker also serves to alert the Clearinghouse that got the document of the need to take account, during the indexing process, of the viewpoints of the alternative Clearinghouses. This can be done by consulting the lists of "Most Frequently Used Index Terms" provided in the Scope of Interest Guide (Appendix C) for each Clearinghouse.



SCOPE OF INTEREST NOTICE

The ERIC Facility has assigned this document for processing to:

In our judgement, this document is also of interest to the clearinghouses noted to the right. Indexing should reflect their special points of view.

FIGURE 4-3
SCOPE OVERLAP STICKER

Note that Clearinghouse assignment, and the number of copies received, are recorded on the Title File Card (Figure 4-1); if duplicate copies of the document are received later, they can be directed, if needed, to the same Clearinghouse.

4.2.7 PRIORITY Document Handling

There are two classes of ERIC handling priorities: (1) ROUTINE; (2) PRIORITY. Certain reports are designated by Central ERIC for rapid or PRIORITY handling; these are identified by a special PRIORITY Handling Form (Figure 4-4). All other reports are considered ROUTINE and carry no special identification.

PRIORITY

Please EXPEDITE the processing of the attached report and return it to the ERIC Facility for announcement in the ____________________ issue of RIE.

FIGURE 4-4
PRIORITY HANDLING FORM

The PRIORITY Handling Form is generally affixed by the ERIC Facility just prior to transmittal to the Clearinghouse. PRIORITY documents are handled before ROUTINE documents at all stages by the Facility and are sent separately by the fastest means to the Clearinghouses for processing.

The Clearinghouses must process PRIORITY documents in time to make the next issue of RIE still open to accessions. This issue is marked on the PRIORITY Form itself, but can also be determined from the ERIC Master Schedule. In some cases, when the RIE issue deadline is very close, PRIORITY documents must be handled within 24 hours of receipt. (In the case of some special projects, an RIE issue other than the very next one may be specified on the form).

The Facility maintains a suspense file for all PRIORITY documents. This file is used to monitor processing of these documents and to provide the concerned parties with information such as Clearinghouse Accession Number, projected RIE issue, etc., as they become known.

4.2.8 ED Number Assignment

ED Accession Numbers are assigned automatically to documents by the computer system as one of the last steps in computer processing. This action is necessarily delayed so that all duplications, rejects, and other removals can be accomplished before accessioning. The resulting unbroken sequence of ED numbers is a system feature very useful to readers of the RIE journal, users of the magnetic tapes, and subscribers to the ERIC microfiche collection.

4.2.9 Transfer of Documents to EDRS

When computer assignment of the ED numbers has been completed, the Facility records the ED number in a standard position (upper left hand corner) on the cover (or first sheet to be filmed) of each document. Computer-produced "Single-Frame Resumes" (printouts of the final computer record for each accession) are then matched with the documents and both are transferred to the ERIC Document Reproduction Service (EDRS) for filming. Figure 4-5 depicts a Single-Frame Resume.

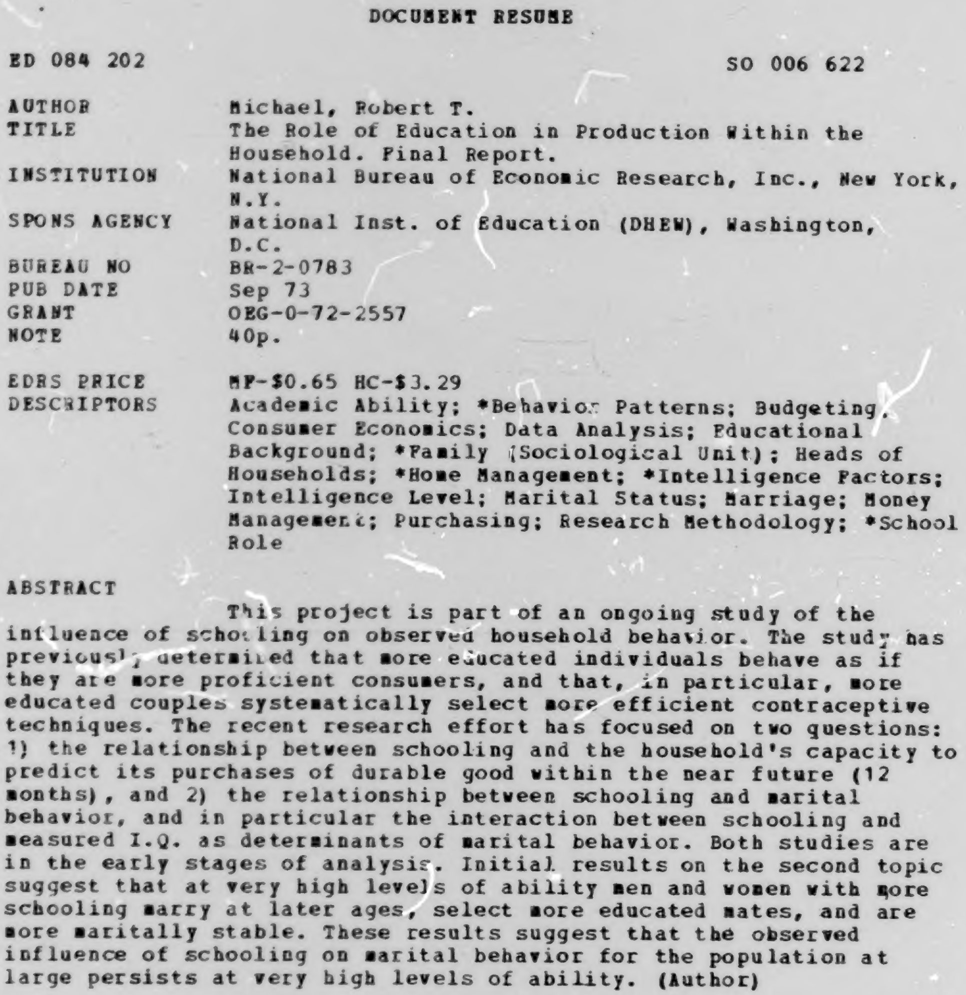
4.2.10 Reply cards (Acknowledgments to Contributors)

Many contributors request to be notified of the disposition of their documents, including the ED numbers assigned if the documents are selected. Providing such a service can be a powerful inducement to contributors and, as such, a valuable acquisitions negotiating tool. The Facility directs such contributors to attach a self-addressed postcard to the covers of their documents. In some cases, the Facility attaches such a card for the contributor (See Figure 4-6).

Documents bearing Reply Cards go through the same steps as any others and are eventually assigned and transferred to appropriate Clearinghouses.

If the Clearinghouse rejects such a document the decision should be so indicated in the appropriate place on the card. (Supplying a reason for non-selection is optional and at the discretion of the Clearinghouse). The card should then be removed from the document and mailed to the contributor.

If the Clearinghouse selects such a document for RIE announcement, the card should simply be left attached to the document when it is returned to the Facility. The Facility will then eventually enter on the card the ED number assigned to the document and mail the card to the contributor.



DOCUMENT RESUME

ED 084 202 SO 006 622

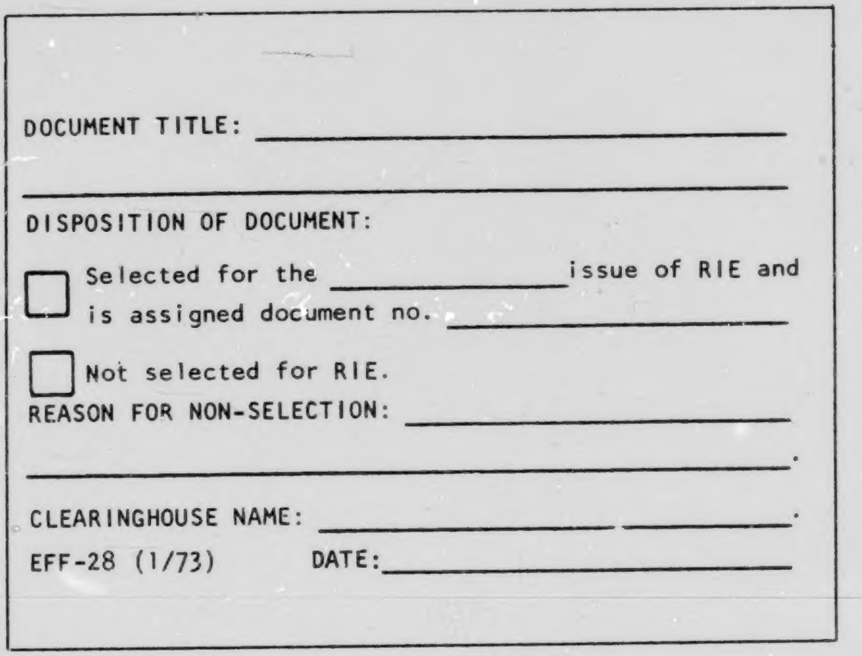
AUTHOR	Michael, Robert T.
TITLE	The Role of Education in Production Within the Household. Final Report.
INSTITUTION	National Bureau of Economic Research, Inc., New York, N.Y.
SPONS AGENCY	National Inst. of Education (DHEW), Washington, D.C.
BUREAU NO	BR-2-0783
PUB DATE	Sep 73
GRANT	OEG-0-72-2557
NOTE	40p.
EDRS PRICE	MF-$0.65 HC-$3.29
DESCRIPTORS	Academic Ability; *Behavior Patterns; Budgeting; Consumer Economics; Data Analysis; Educational Background; *Family (Sociological Unit); Heads of Households; *Home Management; *Intelligence Factors; Intelligence Level; Marital Status; Marriage; Money Management; Purchasing; Research Methodology; *School Role

ABSTRACT

This project is part of an ongoing study of the influence of schooling on observed household behavior. The study has previously determined that more educated individuals behave as if they are more proficient consumers, and that, in particular, more educated couples systematically select more efficient contraceptive techniques. The recent research effort has focused on two questions: 1) the relationship between schooling and the household's capacity to predict its purchases of durable good within the near future (12 months), and 2) the relationship between schooling and marital behavior, and in particular the interaction between schooling and measured I.Q. as determinants of marital behavior. Both studies are in the early stages of analysis. Initial results on the second topic suggest that at very high levels of ability men and women with more schooling marry at later ages, select more educated mates, and are more maritally stable. These results suggest that the observed influence of schooling on marital behavior for the population at large persists at very high levels of ability. (Author)

FIGURE 4-5
SINGLE-FRAME RESUME (COMPUTER-PRODUCED)

Clearinghouses may originate such cards if they wish, or they may choose to notify their own contributors by form letter or other means after the relevant issue of RIE has been published. Clearinghouse systems for thanking or otherwise notifying document contributors are entirely optional and should not necessarily be regarded as either replacing or replaced by the Facility Reply Card system described here.



DOCUMENT TITLE: ______________________________

____

DISPOSITION OF DOCUMENT:

☐ Selected for the ______________ issue of RIE and is assigned document no. ______________

☐ Not selected for RIE.

REASON FOR NON-SELECTION: ______________________

____.

CLEARINGHOUSE NAME: ____________ ____________.

EFF-28 (1/73) DATE: ______________________

FIGURE 4-6
REPLY CARD
(Address of Source on Reverse Side)

4.3 CLEARINGHOUSE HANDLING

4.3.1 Receiving

The majority of the documents received by the Clearinghouses arrive through their own efforts. The Facility program provides supplementary input. In some few cases, documents are transferred from one Clearinghouse to another.

The Clearinghouse receiving function should follow the same precautions as described in Section 4.2.5 in ensuring that information of use to document processors is not discarded, but is retained with the document.

4.3.2 Logging, Checking, and Establishing Basic Control

The exact nature of the logs and files maintained by the Clearinghouses to control incoming documents is up to the individual Clearinghouse. As indicated in Section 2.4.6, however, certain basic statistics must be reported quarterly to Central ERIC. It is advisable, therefore, that the Clearinghouses develop a log, file, or other type of record, that gathers, as a minimum, the following types of information about incoming documents:

- Data Acquired
- Title (May Be Truncated)
- Author
- Source (e.g., State, Local, Federal, Facility, academic, non-profit, commercial, foreign, international, etc.)
- Contributor (if different from source)
- Disposition (e.g., RIE, local files, transfer, duplicate, discard)

It is also a fairly uniform practice among acquisitions operations to maintain an "On-Order" file, so that the results of specific requests or orders for documents can be determined and followed-up, if necessary.

A description of the Facility's Title File for in-process documents is given in Section 4.2.3.

4.3.3 Duplicate Checking

It is the responsibility of the Clearinghouses to check all documents received to determine whether they are duplicates of those already in the system or duplicates of items in-process at one of the Clearinghouses (including possibly their own). The further a duplicate makes it through the system, the more time, money, and effort are wasted. A duplicate that is announced in RIE adds nothing to the file, presents "noise" for the users but expends a significant amount of the system's resources.

The first question that must be asked is whether the document is already in RIE. In order to determine this, searches can be made of RIE itself (using the cumulative and issue indexes) the cumulative Title Index (and its quarterly supplements), and in certain situations, the Contract/Grant Number Index and the Report/Project Number Index. Close attention should be paid to the date of publication in making this check. A document dated 1974 could obviously not have been announced in 1973 or earlier, thus limiting the search that must be made.

The second question is whether the document is in-process anywhere. In order to determine this, searches should be made of the Acquisitions Data Report (ADR) and of the Clearinghouse's internal files. The ADR is the system-wide tool for determing what is in-process at the various decentralized processing centers of the ERIC network.

If the document is not found in either of the two checks described above, an entry should immediately be made for it in the ADR (See Section 4.3.5 for how to do this). This action essentially "stakes a claim" for the document. Other Clearinghouses finding an entry for the document in the ADR will realize that it is pre-empted and treat it as a duplicate. The document may then be passed forward for cataloging, indexing, and abstracting.

If the document is found to be a duplicate and already in RIE, it can be discarded. If it is found to be a duplicate in-process, the ADR "intended use" code should be checked. If the first Clearinghouse in possession of the document did not select it for RIE, the second Clearinghouse can evaluate the document with this information in hand, contacting the first Clearinghouse if desired. If the second Clearinghouse decides to announce the document, an entry reflecting this decision should be prepared for the ADR.

Sometimes two or more Clearinghouses receive the same document simultaneously and their respective entries for the ADR appear there simultaneously. Duplicate ADR entries are identified by an asterisk*. When a Clearinghouse detects such entries, it should contact the other Clearinghouse(s) involved and negotiate a settlement satisfactory to all concerned. Processing information that may already have been generated by one of the Clearinghouses can usefully be transferred in certain instances.

---

*Note that a minor character or space variation in entry will void the asterisk. The ADR must, therefore, be used carefully.

4.3.4 Accessioning

Since the final and permanent ED accession number is assigned late in the processing cycle, it becomes necessary to generate a preliminary accession number in order to identify each document while it is in-process.

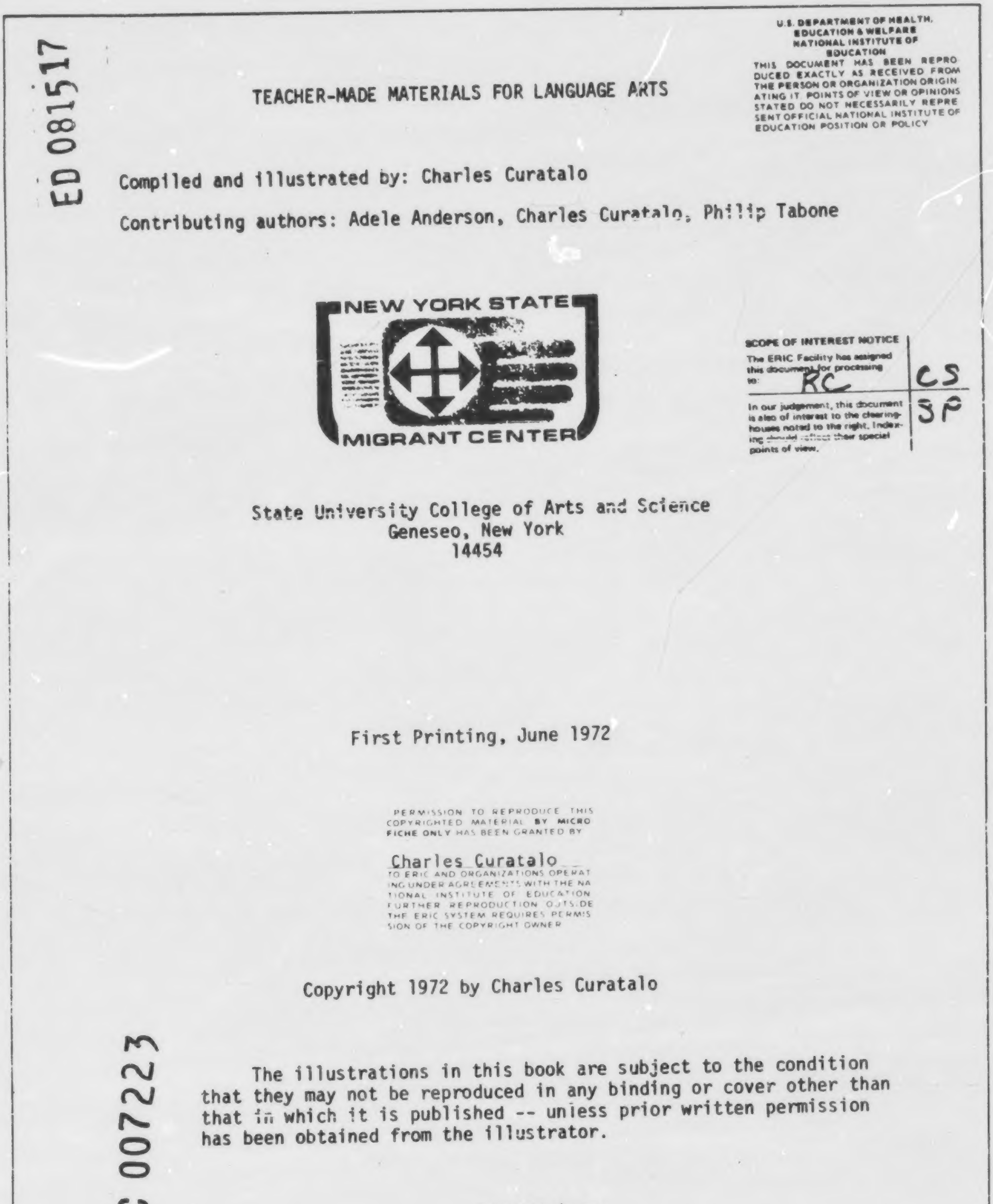
Each Clearinghouse in the ERIC system is identified by a two-letter alpha prefix, e.g., CE, FL, UD, etc. (See Appendix G for the complete list). This prefix, together with a six-digit number, forms a preliminary Clearinghouse Accession Number. Up to the time they are announced in RIE, all documents (and associated paperwork) are identified and referred to by this number. Since RIE announcements are grouped by Clearinghouse, this number becomes, in effect, the "sort key" for each RIE issue.

Each Clearinghouse should maintain a log so as to keep track of numbers assigned and to avoid assigning the same number twice. Documents consisting of several separate parts or volumes should ideally be assigned consecutive numbers in order to keep them together throughout processing and announcement. When assigned to a document, the Clearinghouse Accession Number should be stamped or written in the lower left hand corner of the document cover (or first sheet to be filmed). See Figure 4-7.

Each issue of RIE contains a "Clearinghouse Number to ED Number Cross-Reference List" for that issue. In addition, the Facility produces a cumulated version of this listing for the entire RIE file to date.

4.3.5 Acquisitions Data Report (ADR)

Because of the decentralized nature of the ERIC system, it is necessary to devise some way for each of the Clearinghouses to be able to check on which documents are being processed by the other Clearinghouses. The differing subject specialization of each Clearinghouse is not enough to avoid potential duplicate effort. Document



ED 081517

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION
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TEACHER-MADE MATERIALS FOR LANGUAGE ARTS

Compiled and illustrated by: Charles Curatalo

Contributing authors: Adele Anderson, Charles Curatalo, Philip Tabone

NEW YORK STATE
MIGRANT CENTER

SCOPE OF INTEREST NOTICE
The ERIC Facility has assigned this document for processing to: RC

In our judgement, this document is also of interest to the clearinghouses noted to the right. Indexing should reflect their special points of view.

CS
SP

State University College of Arts and Science
Geneseo, New York
14454

First Printing, June 1972

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RC 007223

FIGURE 4-7

TITLE PAGE Showing Position of: Clearinghouse Accession Number, ED Accession Number, NIE Policy Disclaimer Label, Reproduction Release Label, Scope Overlap Sticker.

topics have a way of overlapping Clearinghouses and it is not unusual for two or more Clearinghouses to feel equally justified in processing a given document.

The Acquisitions Data Report (ADR) is intended to accomplish this coordination. It is a composite list incorporating the previous month's accessions of all the Clearinghouses. It is produced monthly by the Facility on the basis of input received from the Clearinghouses. The current format is a six-month running cumulation (e.g., Jan.-June. Feb.-July, Mar.-Aug., etc.), with entries made by personal author, or by title when no personal author exists. See Figure 4-8A and B for sample ADR pages.

At the time a Clearinghouse decides to assign a Clearinghouse Accession Number to a document, the accession should be recorded on the Acquisitions Data Form (Figure 4-9). These forms are available from the ERIC Facility. On the last working day of every month the Clearinghouse should send the Facility (via Certified Air Mail) the Acquisitions Data Forms containing records for all the documents accessioned during that month. The Facility waits until it has received input from all Clearinghouses (about one week), then keys the data, enters it into the special Acquisitions Data File, produces the ADR report, prints the report, and distributes copies to all Clearinghouses. The ADR containing a given month's data is available approximately three (3) weeks after the cut-off (or about the 21st of the next month).

The instructions for completing the Acquisitions Data Form are as follows:

o Enter the Clearinghouse Accession Number in Columns 1-8, e.g., "CE123456".

o Enter the Personal Author's name in Columns 10-29, e.g., "BROWN, JOHN J." Truncate, if necessary.

o Enter the Title in Columns 30-69. Record the title exactly as it appears on the document, with the sole exception that initial punctuation marks (e.g., quotation marks) should be omitted. This simple rule will facilitate both the original making of entries and the later comparison of titles during duplicate checking. Truncate the title if necessary, but do not abbreviate. Documents with titles that are the same for more than 40 characters should be distinguished from one another by title truncation and the addition of some distinguishing data, e.g., VOL 1, VOL 2, etc.

- Enter a code number for "Intended Use" in Column 73. The codes are:

  1 = Selected for RIE Announcement
  2 = For Local Files
  3 = Other

Column 9 is preprinted with the code A, indicating the record is to be "Added" to the file. (Deletes and Changes are no longer made to this highly transient file).

Columns 72, 74, 75-77, and 78 are no longer in use and may be ignored.

The month to which the data pertain should be recorded in the upper left corner of the ADR in the space provided, e.g., 01, 02, 03, ---12. Since several sheets will normally be required to report one Clearinghouse's accessions, the sheets should be numbered in the upper right corner, in the space provided, e.g., 1 of 3, 2 of 3, 3 of 3, etc.

Since keying is done directly from the forms, entries should be written neatly in unambiguous block capitals. The following conventions should be used:

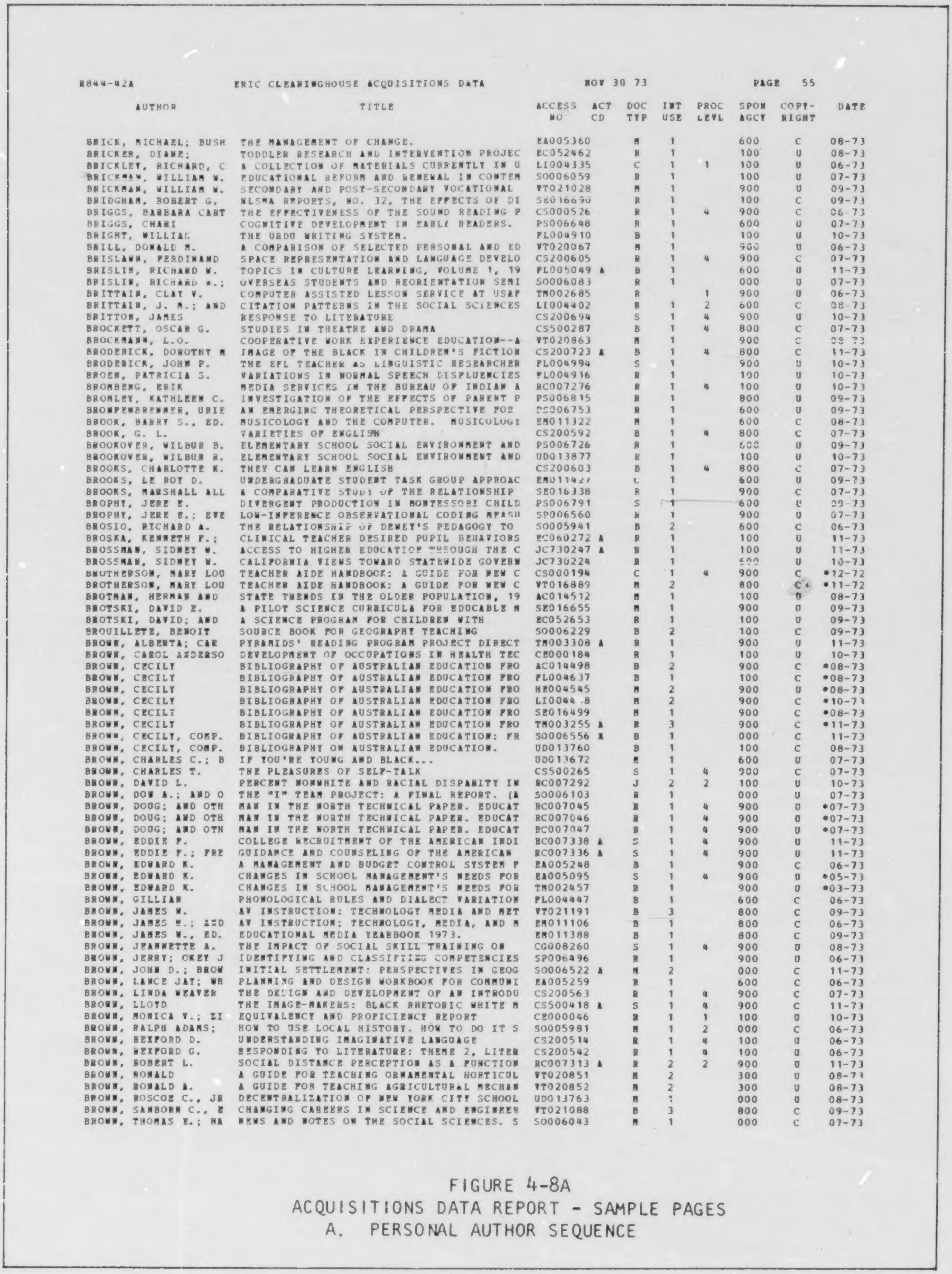
Alpha Character	Number
Ø (oh)	0 (zero)
I (eye)	1 (one)
Ƶ (zee)	2 (two)

The following types of entries are considered invalid and are rejected by the computer system:

- Invalid Clearinghouse prefix letters

- Invalid Clearinghouse number following the prefix, e.g., less than six digits, non-numeric characters, etc.

- Clearinghouse Accession Number previously reported (the later-arriving record is rejected)



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R844-42A            ERIC CLEARINGHOUSE ACQUISITIONS DATA                  NOV 30 73                  PAGE   55

       AUTHOR                          TITLE                       ACCESS   ACT   DOC   INT   PROC   SPON   COPY-    DATE
                                                                     NO     CD    TYP   USE   LEVL   AGCY   RIGHT

BRICK, MICHAEL; BUSH  THE MANAGEMENT OF CHANGE.                   EA005360          M     1           600     C     08-73
BRICKER, DIANE;       TODDLER RESEARCH AND INTERVENTION PROJEC    EC052462          R     1           100     U     08-73
BRICKLEY, RICHARD, C  A COLLECTION OF MATERIALS CURRENTLY IN U    LI004335          C     1     1     100     U     06-73
BRICKMAN, WILLIAM W.  EDUCATIONAL REFORM AND RENEWAL IN CONTEM    SO006059          R     1           100     U     07-73
BRICKMAN, WILLIAM W.  SECONDARY AND POST-SECONDARY VOCATIONAL     VT021028          M     1           900     U     09-73
BRIDGHAM, ROBERT G.   NLSMA REPORTS, NO. 32, THE EFFECTS OF DI    SE016690          R     1           100     C     09-73
BRIGGS, BARBARA CART  THE EFFECTIVENESS OF THE SOUND READING P    CS000526          R     1     4     900     C     06-73
BRIGGS, CHARI         COGNITIVE DEVELOPMENT IN EARLY READERS.     PS006648          R     1           600     U     07-73
BRIGHT, WILLIAM       THE URDU WRITING SYSTEM.                    FL004910          B     1           100     U     10-73
BRILL, DONALD M.      A COMPARISON OF SELECTED PERSONAL AND ED    VT020067          M     1           900     U     06-73
BRISLAWN, FERDINAND   SPACE REPRESENTATION AND LANGUAGE DEVELO    CS200605          R     1     4     900     C     07-73
BRISLIN, RICHARD W.   TOPICS IN CULTURE LEARNING, VOLUME 1, 19    FL005049 A        B     1           600     U     11-73
BRISLIN, RICHARD W.;  OVERSEAS STUDENTS AND REORIENTATION SEMI    SO006083          R     1           000     U     07-73
BRITTAIN, CLAY V.     COMPUTER ASSISTED LESSON SERVICE AT USAF    TM002685          R           1     900     U     06-73
BRITTAIN, J. M.; AND  CITATION PATTERNS IN THE SOCIAL SCIENCES    LI004402          R     1     2     600     C     08-73
BRITTON, JAMES        RESPONSE TO LITERATURE                      CS200694          S     1     4     900     U     10-73
BROCKETT, OSCAR G.    STUDIES IN THEATRE AND DRAMA                CS500287          B     1     4     800     C     07-73
BROCKMANN, L.O.       COOPERATIVE WORK EXPERIENCE EDUCATION--A    VT020863          M     1           900     C     09-73
BRODERICK, DOROTHY M  IMAGE OF THE BLACK IN CHILDREN'S FICTION    CS200723 A        B     1     4     800     C     11-73
BRODERICK, JOHN P.    THE EFL TEACHER AS LINGUISTIC RESEARCHER    FL004994          S     1           900     U     10-73
BROEN, PATRICIA S.    VARIATIONS IN NORMAL SPEECH DISFLUENCIES    FL004916          R     1           100     U     10-73
BROMBERG, ERIK        MEDIA SERVICES IN THE BUREAU OF INDIAN A    RC007276          R     1     4     100     U     10-73
BROMLEY, KATHLEEN C.  INVESTIGATION OF THE EFFECTS OF PARENT P    PS006815          R     1           800     U     09-73
BRONFENBRENNER, URIE  AN EMERGING THEORETICAL PERSPECTIVE FOR     PS006753          R     1           600     U     09-73
BROOK, BARRY S., ED.  MUSICOLOGY AND THE COMPUTER.  MUSICOLOGY    EM011322          M     1           600     C     08-73
BROOK, G. L.          VARIETIES OF ENGLISH                        CS200592          B     1     4     800     C     07-73
BROOKOVER, WILBUR B.  ELEMENTARY SCHOOL SOCIAL ENVIRONMENT AND    PS006726          R     1           600     U     09-73
BROOKOVER, WILBUR B.  ELEMENTARY SCHOOL SOCIAL ENVIRONMENT AND    UD013877          R     1           100     U     10-73
BROOKS, CHARLOTTE K.  THEY CAN LEARN ENGLISH                      CS200603          B     1     4     800     C     07-73
BROOKS, LE ROY D.     UNDERGRADUATE STUDENT TASK GROUP APPROAC    EM011427          C     1           600     U     09-73
BROOKS, MARSHALL ALL  A COMPARATIVE STUDY OF THE RELATIONSHIP     SE016338          R     1           900     C     07-73
BROPHY, JERE E.       DIVERGENT PRODUCTION IN MONTESSORI CHILD    PS006791          S     1           600     U     09-73
BROPHY, JERE E.; EVE  LOW-INFERENCE OBSERVATIONAL CODING MEASU    SP006560          R     1           900     U     07-73
BROSIO, RICHARD A.    THE RELATIONSHIP OF DEWEY'S PEDAGOGY TO     SO005941          B     2           600     C     06-73
BROSKA, KENNETH F.;   CLINICAL TEACHER DESIRED PUPIL BEHAVIORS    EC060272 A        R     1           100     U     11-73
BROSSMAN, SIDNEY W.   ACCESS TO HIGHER EDUCATION THROUGH THE C    JC730247 A        R     1           100     U     11-73
BROSSMAN, SIDNEY W.   CALIFORNIA VIEWS TOWARD STATEWIDE GOVERN    JC730224          R     1           600     U     10-73
BROTHERSON, MARY LOU  TEACHER AIDE HANDBOOK: A GUIDE FOR NEW C    CS000194          C     1     4     900     C    *12-72
BROTHERSON, MARY LOU  TEACHER AIDE HANDBOOK: A GUIDE FOR NEW C    VT016889          M     2           800     C    *11-72
BROTMAN, HERMAN AND   STATE TRENDS IN THE OLDER POPULATION, 19    AC014512          M     1           100     U     08-73
BROTSKI, DAVID E.     A PILOT SCIENCE CURRICULA FOR EDUCABLE M    SE016655          M     1           900     U     09-73
BROTSKI, DAVID; AND   A SCIENCE PROGRAM FOR CHILDREN WITH         EC052653          R     1           100     U     09-73
BROUILLETE, BENOIT    SOURCE BOOK FOR GEOGRAPHY TEACHING          SO006229          B     2           100     C     09-73
BROWN, ALBERTA; CAR   PYRAMIDS' READING PROGRAM PROJECT DIRECT    TM003308 A        R     1           900     U     11-73
BROWN, CAROL ANDERSO  DEVELOPMENT OF OCCUPATIONS IN HEALTH TEC    CE000184          R     1           100     U     10-73
BROWN, CECILY         BIBLIOGRAPHY OF AUSTRALIAN EDUCATION PRO    AC014498          B     2           900     C    *08-73
BROWN, CECILY         BIBLIOGRAPHY OF AUSTRALIAN EDUCATION PRO    FL004637          B     1           100     C    *08-73
BROWN, CECILY         BIBLIOGRAPHY OF AUSTRALIAN EDUCATION PRO    HE004545          M     2           900     U    *08-73
BROWN, CECILY         BIBLIOGRAPHY OF AUSTRALIAN EDUCATION PRO    LI0044 8          M     2           900     C    *10-73
BROWN, CECILY         BIBLIOGRAPHY OF AUSTRALIAN EDUCATION PRO    SE016499          M     1           900     C    *08-73
BROWN, CECILY         BIBLIOGRAPHY OF AUSTRALIAN EDUCATION PRO    TM003255 A        R     3           900     C    *11-73
BROWN, CECILY, COMP.  BIBLIOGRAPHY OF AUSTRALIAN EDUCATION: FR    SO006556 A        B     1           000     C     11-73
BROWN, CECILY, COMP.  BIBLIOGRAPHY ON AUSTRALIAN EDUCATION.       UD013760          B     1           100     C     08-73
BROWN, CHARLES C.; B  IF YOU'RE YOUNG AND BLACK...                UD013672          M     1           600     U     07-73
BROWN, CHARLES T.     THE PLEASURES OF SELF-TALK                  CS500265          S     1     4     900     C     07-73
BROWN, DAVID L.       PERCENT NONWHITE AND RACIAL DISPARITY IN    RC007292          J     2     2     100     U     10-73
BROWN, DON A.; AND O  THE "I" TEAM PROJECT: A FINAL REPORT. (A    SO006103          R     1           000     U     07-73
BROWN, DOUG; AND OTH  MAN IN THE NORTH TECHNICAL PAPER. EDUCAT    RC007045          R     1     4     900     U    *07-73
BROWN, DOUG; AND OTH  MAN IN THE NORTH TECHNICAL PAPER. EDUCAT    RC007046          R     1     4     900     U    *07-73
BROWN, DOUG; AND OTH  MAN IN THE NORTH TECHNICAL PAPER. EDUCAT    RC007047          B     1     4     900     U    *07-73
BROWN, EDDIE F.       COLLEGE RECRUITMENT OF THE AMERICAN INDI    RC007338 A        S     1     4     900     U     11-73
BROWN, EDDIE F.; FRE  GUIDANCE AND COUNSELING OF THE AMERICAN     RC007336 A        S     1     4     900     U     11-73
BROWN, EDWARD K.      A MANAGEMENT AND BUDGET CONTROL SYSTEM F    EA005248          B     1           900     C     06-73
BROWN, EDWARD K.      CHANGES IN SCHOOL MANAGEMENT'S NEEDS FOR    EA005095          S     1     4     900     U    *05-73
BROWN, EDWARD K.      CHANGES IN SCHOOL MANAGEMENT'S NEEDS FOR    TM002457          R     1           900     U    *03-73
BROWN, GILLIAN        PHONOLOGICAL RULES AND DIALECT VARIATION    FL004447          B     1           600     C     06-73
BROWN, JAMES W.       AV INSTRUCTION: TECHNOLOGY MEDIA AND MET    VT021191          B     3           800     C     09-73
BROWN, JAMES W.; AND  AV INSTRUCTION; TECHNOLOGY, MEDIA, AND M    EM011106          B     1           800     C     06-73
BROWN, JAMES W., ED.  EDUCATIONAL MEDIA YEARBOOK 1973.            EM011388          B     1           800     C     09-73
BROWN, JEANNETTE A.   THE IMPACT OF SOCIAL SKILL TRAINING ON      CG008260          S     1     4     900     U     08-73
BROWN, JERRY; OKEY J  IDENTIFYING AND CLASSIFYING COMPETENCIES    SP006496          R     1           900     U     06-73
BROWN, JOHN D.; BROW  INITIAL SETTLEMENT: PERSPECTIVES IN GEOG    SO006522 A        M     2           000     C     11-73
BROWN, LANCE JAY; WR  PLANNING AND DESIGN WORKBOOK FOR COMMUNI    EA005259          R     1           600     C     06-73
BROWN, LINDA WEAVER   THE DESIGN AND DEVELOPMENT OF AN INTRODU    CS200563          R     1     4     900     C     07-73
BROWN, LLOYD          THE IMAGE-MAKERS: BLACK RHETORIC WHITE M    CS500418 A        S     1     4     900     C     11-73
BROWN, MONICA V.; ZI  EQUIVALENCY AND PROFICIENCY REPORT          CE000046          R     1     1     100     U     10-73
BROWN, RALPH ADAMS;   HOW TO USE LOCAL HISTORY. HOW TO DO IT S    SO005981          B     1     2     000     C     06-73
BROWN, REXFORD D.     UNDERSTANDING IMAGINATIVE LANGUAGE          CS200514          R     1     4     100     U     06-73
BROWN, REXFORD G.     RESPONDING TO LITERATURE: THEME 2, LITER    CS200542          R     1     4     100     U     06-73
BROWN, ROBERT L.      SOCIAL DISTANCE PERCEPTION AS A FUNCTION    RC007313 A        R     2     2     900     U     11-73
BROWN, RONALD         A GUIDE FOR TEACHING ORNAMENTAL HORTICUL    VT020851          M     2           300     U     08-73
BROWN, RONALD A.      A GUIDE FOR TEACHING AGRICULTURAL MECHAN    VT020852          M     2           300     U     08-73
BROWN, ROSCOE C., JR  DECENTRALIZATION OF NEW YORK CITY SCHOOL    UD013763          M     1           000     U     08-73
BROWN, SANBORN C., E  CHANGING CAREERS IN SCIENCE AND ENGINEER    VT021088          B     3           800     C     09-73
BROWN, THOMAS E.; HA  NEWS AND NOTES ON THE SOCIAL SCIENCES. S    SO006043          M     1           000     C     07-73
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FIGURE 4-8A

ACQUISITIONS DATA REPORT - SAMPLE PAGES

A. PERSONAL AUTHOR SEQUENCE

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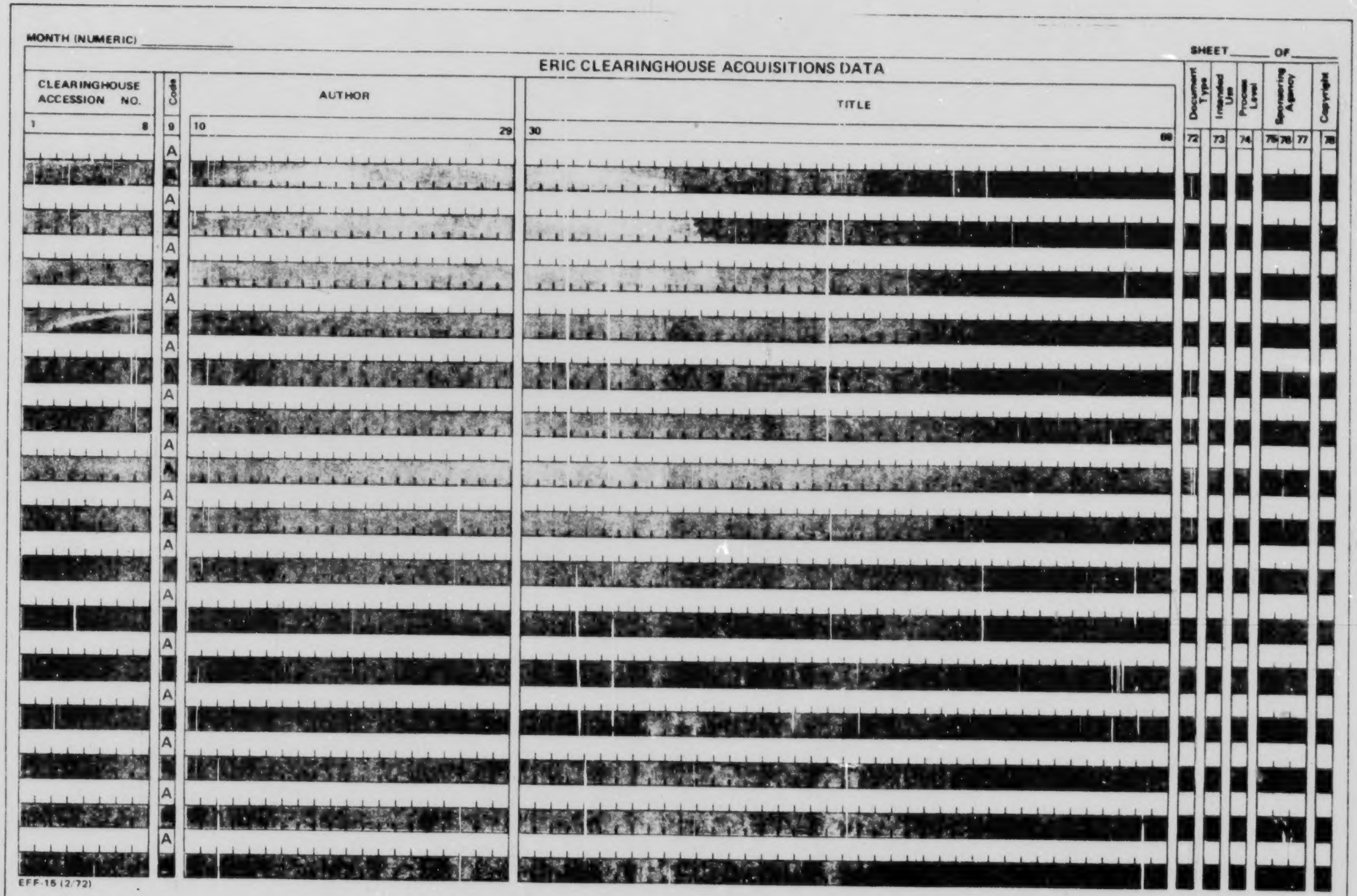
8844-4            ERIC CLEARINGHOUSE ACQUISITIONS DATA          NOV 30 73              PAGE    6

    AUTHOR                      TITLE                    ACCESS   ACT  DOC  INT  PROC  SPON  COPY-    DATE
                                                           NO     CD   TYP  USE  LEVL  AGCY  RIGHT

                 ASIANS AND ASIAN AMERICANS.             UD013958 A     M    1         500     U     11-73
                 ASSESSMENT OF OREGON'S EDUCATIONAL NEEDS TM003238 A    R    1         900     U     11-73
                 ASSISTING IN THE CLASSROOM. AN INDIVIDUA SP006929      R    1         100     U     10-73
                 ASSISTING VOCATIONAL DEVELOPMENT IN THE  VT021265      M    3         900     U     09-73
                 ATLANTA JOBS FOR THE FUTURE: INDUSTRIES  VT020868      R    2         300     U     08-73
                 ATMOSPHERIC SAMPLING.                    VT020766      M    2         100     U     08-73
                 AUDIOVISUAL HOLDINGS OF THE PRESIDENTIAL EM011452      C    1         100     U     09-73
                 AUDIOVISUAL MATERIALS FOR ENVIRONMENTAL  SE014539      M    1         300     U    *09-72
                 AUDIOVISUAL MATERIALS FOR ENVIRONMENTAL  SO004393      M    2         000     U    *08-72
                 AUGUST DOCUMENT.                         SP006767      R    1         600     U     09-73
                 AUTHORIZED COURSE OF INSTRUCTION FOR THE AC014508      M    1         400     U    *08-73
                 AUTHORIZED COURSE OF INSTRUCTION FOR THE AC014509      M    1         400     U    *08-73
                 AUTHORIZED COURSE OF INSTRUCTION FOR THE AC014510      M    1         400     U    *08-73
                 AUTO MECHANICS: BLOCK III: CHASIS.       VT020809      M    2         300     U     08-73
                 AUTO MECHANICS: BLOCK IV: ENGINES.       VT020810      M    2         300     U     08-73
                 AUTO MECHANICS: BLOCK V: FUEL SYSTEMS.   VT020811      M    2         300     U     08-73
                 AUTO MECHANICS: BLOCK VI: ELECTRICAL SYS VT020812      M    2         300     U     08-73
                 AUTO MECHANICS: BLOCK VII: TUNE-UP AND   VT020813      M    2         300     U     08-73
                 AUTO MECHANICS: BLOCK VIII: HEATING AND  VT020814      M    2         300     U     08-73
                 AUTO MECHANICS: BLOCKS I AND II: INTRODU VT020807      M    2         300     U     08-73
                 AUTOMATED INSTRUCTIONAL MANAGEMENT SYSTE SE016059      M    1         600     U    *05-73
                 AUTOMATED INSTRUCTIONAL MANAGEMENT SYSTE SE016060      M    1         600     U    *05-73
                 AUTOMATED INSTRUCTIONAL MANAGEMENT SYSTE SE016061      M    1         600     U    *05-73
                 AUTOMATED INSTRUCTIONAL MANAGEMENT SYSTE SE016062      M    1         600     U    *05-73
                 AUTOMATED INSTRUCTIONAL MANAGEMENT SYSTE SE016063      M    1         600     U    *05-73
                 AUTOMATED INSTRUCTIONAL MANAGEMENT SYSTE SE016064      M    1         600     C    *05-73
                 AUTOMATED PILOT PERFORMANCE ASSESSMENT I EM011144      R    1         100     U     06-73
                 AUTOMATIC DATA PROCESSING SUPPLEMENT TO  VT020498      M    2         300     U     07-73
                 AUTOMATION IN DEVELOPING COUNTRIES. ROUN VT020239      C    1         900     C     06-73
                 AUTONOMY VS. COORDINATION IN HIGHER EDUC HE004348      R    3         900     C     07-73
                 AVIATION BOATSWAIN'S MATE E 3 AND 2. RAT VT020616      M    2         100     U     08-73
                 AVIATION BOATSWAIN'S MATE H 1 AND C      CE000297 A    B    1         100     U     11-73
                 AVIATION MACHINIST'S MATE J1 AND C. RATE VT020638      M    2         100     U     08-73
                 AXIOMS AND GOALS, SELECTED RECOMMENDATIO SP006586      R    3         900     C     07-73
                 BACKGROUND MATERIAL ON NATIONAL INSTRUCT EM011359      R    1         600     C     08-73
                 BACKGROUND PAPER: THE EFFECTS OF FACULTY HE004638      R    1         900     U     09-73
                 BANDS AND REGISTERED INDIAN MEMBERSHIP B RC007187      R    2    2    100     U    *09-73
                 BANDS AND REGISTERED INDIAN MEMBERSHIP B RC007189      M    2    2    100     U    *09-73
                 BARBARA SUSAN PAPISH V. THE BOARD OF CUR HE004438      R    1         100     U     07-73
                 BARRIERS TO HEALTH CARE FOR OLDER AMERIC UD013800      M    2         100     U     09-73
                 BASIC COMPUTER OPERATOR: COURSE PLAN.    VT020824      M    2         100     U     08-73
                 BASIC COURSE IN HIGHWAY TRAFFIC RECORDS  CE000343 A    M    1         100     U     11-73
                 BASIC STATISTICS ON INSTRUCTIONAL TELEVI EM011523      M    1         100     U     10-73
                 BBC HANDBOOK 1973.                       EM011327      B    1         900     C     08-73
                 BEAR CREEK, ALABAMA, TEACHERS' WORKSHOP  SE016140 -    M    1         100     U     06-73
                 BEAUTY PRODUCTS AND THE CONSUMER.        SP006663      R    1         300     U     08-73
                 BEAUTY PRODUCTS AND THE CONSUMER. ONE OF VT020618      M    2         300     U     08-73
                 BECOMING A SCHOOL VOLUNTEER. AN INDIVIDU SP006932      R    1         100     U     10-73
                 BECOMING BILINGUAL.                      FL004719      B    2         500     U     08-73
                 BECOMING RESPONSIBLE FOR PERSONAL CARE;  VT021248      M    2         300     U     09-73
                 BEHAVIORAL OBJECTIVES: LANGUAGE AND LITE CS200655      B    1    4    300     U     09-73
                 BEHAVIORAL SCIENCE ELEMENTARY TEACHER ED SO004866      B    3         100     U    *10-72
                 BEHAVIORAL SCIENCE ELEMENTARY TEACHER ED SO004867      B    3         100     U    *10-72
                 BETTER GROUP MEETINGS                    AC014430      M    1         100     U     07-73
                 BIBLIOGRAPHICAL LISTINGS OF BOOKS, HANDB VT020562      M    2         300     U     08-73
                 BIBLIOGRAPHIE FERNSEHEN UND JUGEND TELEV FL004485      B    1         900     U     06-73
                 BIBLIOGRAPHIE MODERNER FREMDSPRACHENUNTE FL003502      B    1         900     C    *08-72
                 BIBLIOGRAPHIE MODERNER FREMDSPRACHENUNTE FL003933      B    1         900     U    *02-73
                 BIBLIOGRAPHIE MODERNER FREMDSPRACHENUNTE FL004263      B    1         900     C    *05-73
                 BIBLIOGRAPHIE MODERNER FREMDSPRACHENUNTE FL004677      B    1         900     C    *08-73
                 BIBLIOGRAPHIE MODERNER FREMDSPRACHENUNTE FL004913      B    1         000     C    *10-73
                 BIBLIOGRAPHIES: BILINGUAL EDUCATION.     FL004559      M    1         100     U     07-73
                 BIBLIOGRAPHIES: ENGLISH AS A SECOND LANG FL004558      M    1         100     U     07-73
                 BIBLIOGRAPHIES: PUERTO RICAN HERITAGE--C FL004556      M    1         100     U     07-73
                 BIBLIOGRAPHIES: TESL AND TESOL.          FL004557      M    1         100     U     07-73
                 BIBLIOGRAPHY FOR CONTINUING-: PT. 2 OF 4 CE000454 A    B    1         100     U     11-73
                 BIBLIOGRAPHY OF PUBLICATIONS AND PRESENT AC014146      M    1         900     U    *02-73
                 BIBLIOGRAPHY OF PUBLICATIONS AND PRESENT EM010737      B    1         100     U    *02-73
                 BIBLIOGRAPHY OF SPANISH MATERIALS FOR ST FL004590      B    1         300     U     07-73
                 BIBLIOGRAPHY ON EARLY CHILDHOOD.         PS006547      M    1         100     U     06-73
                 BICYCLE SAFETY IN ACTION.                CG008114      M    1    4    900     U     07-73
                 BILINGUAL AGENCIES AND ORGANIZATIONS (NE FL004609      M    1         100     U     07-73
                 BILINGUAL AUDIOVISUAL MATERIALS, DISSEMI FL004610      M    1         100     U     07-73
                 BILINGUAL EDUCATION IN NEW YORK CITY.    FL004549      R    1         500     U     07-73
                 BILINGUAL EDUCATION PROGRAM: EVALUATION  TM002316      R    1         900     U    *12-72
                 BILINGUAL EDUCATION PROGRAM: EVALUATION  TM002317      R    1         900     U    *12-72
                 BILINGUAL EDUCATION PROGRAM: EVALUATION  TM002318      R    1         900     U    *12-72
                 BILINGUAL EDUCATION PROGRAM: EVALUATION  TM002319      R    1         900     U    *12-72
                 BILINGUAL EDUCATION PROGRAM: EVALUATION  TM002320      R    1         900     U    *12-72
                 BILINGUAL EDUCATION PROGRAM: EVALUATION  TM002321      R    1         900     U    *12-72
                 BILINGUAL EDUCATION PROGRAM: EVALUATION  TM002322      R    1         900     U    *12-72
                 BILINGUAL EDUCATION: A STATEMENT OF POLI FL004548      R    1         300     U     07-73
                 BILINGUAL ERIC PUBLICATIONS.             FL004573      M    1         100     U     07-73
                 BILINGUAL ERIC REPRINTS.                 FL004570      M    1         100     U     07-73
                 BILINGUAL EXAMINATIONS (BOARD OF EXAMINE FL004716      M    2         100     U     08-73
```

FIGURE 4-8B
ACQUISITIONS DATA REPORT - SAMPLE PAGES
B. TITLE SEQUENCE



MONTH (NUMERIC) ______

SHEET ______ OF ______

ERIC CLEARINGHOUSE ACQUISITIONS DATA

CLEARINGHOUSE ACCESSION NO.	Code	AUTHOR	TITLE	Document Type	Intended Use	Process Level	Sponsoring Agency	Copyright
1 … 8	9	10 … 29	30 … 69	72	73	74	75 76 77	78
	A							
	A							
	A							
	A							
	A							
	A							
	A							
	A							
	A							
	A							
	A							
	A							
	A							
	A							
	A							

EFF-15 (2/72)

FIGURE 4-9
ACQUISITIONS DATA INPUT FORM

The ADR flags potential duplicates by printing an asterisk adjacent to the date column. The slightest difference in characters or spacing, however, voids the asterisk. The ADR must therefore be used carefully.

4.3.6 NIE Policy Disclaimer Label

It is important that recipients of ERIC microfiche and reproduced hard copies of documents understand that the documents are collected from a variety of sources and that they are not necessarily reflections of NIE official positions. It is common for organizations such as ERIC, producing abstract journals and operating information systems, to "disclaim" responsibility for the documents they control and disseminate.

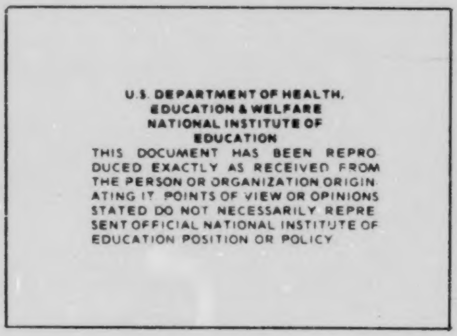
To this end, a standard NIE Policy Disclaimer Label (Figure 4-10) must be affixed to every document processed at Level I or Level II (in the case of Level III, no document is in hand and none is later disseminated by ERIC, so obviously no sticker is required).

The label should be affixed to the cover (or first sheet to be filmed) of the document (See Figure 4-7). This ensures that the label will appear prominently on the first frame of the microfiche. The label is stocked by the ERIC Facility and may be obtained on request.

4.3.7 Reproduction Release Labels

If a document (or a section of a document) is copyrighted, or otherwise restricted in its reproduction, the Clearinghouse should seek permission to reproduce from the Copyright (or proprietary rights) holder. This procedure is described in Section 2.4.5. Permission should always be obtained in writing, either on a standard form like Figure 2-11, or in a letter. Letters of permission must be kept on file indefinitely at the Clearinghouses obtaining them.

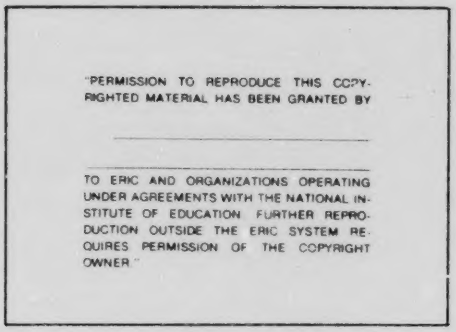
If permission to reproduce for ERIC purposes is obtained, the Clearinghouse must affix the appropriate Level I or Level II Reproduction Release Label (Figure 11A and B), with the grantee's name filled in, to the cover (or first sheet to be filmed) of the document (See Figure 4-7). This procedure assures that the labels will appear prominently on the first frame of the microfiche.



**U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION**

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

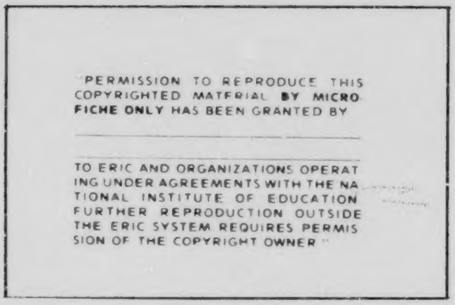
FIGURE 4-10
NIE POLICY DISCLAIMER LABEL



"PERMISSION TO REPRODUCE THIS COPYRIGHTED MATERIAL HAS BEEN GRANTED BY

TO ERIC AND ORGANIZATIONS OPERATING UNDER AGREEMENTS WITH THE NATIONAL INSTITUTE OF EDUCATION FURTHER REPRODUCTION OUTSIDE THE ERIC SYSTEM REQUIRES PERMISSION OF THE COPYRIGHT OWNER"

FIGURE 4-11A
REPRODUCTION RELEASE LABEL
A. LEVEL I



"PERMISSION TO REPRODUCE THIS COPYRIGHTED MATERIAL **BY MICROFICHE ONLY** HAS BEEN GRANTED BY

TO ERIC AND ORGANIZATIONS OPERATING UNDER AGREEMENTS WITH THE NATIONAL INSTITUTE OF EDUCATION FURTHER REPRODUCTION OUTSIDE THE ERIC SYSTEM REQUIRES PERMISSION OF THE COPYRIGHT OWNER"

FIGURE 4-11B
REPRODUCTION RELEASE LABEL
B. LEVEL II

The labels are stocked by the ERIC Facility and may be obtained on request.

4.3.8 PRIORITY Document Handling

Most documents received at the Clearinghouse from the ERIC Facility are not accompanied by any special forms and are ROUTINE, meaning that they can be treated like any other documents that arrive as candidates for RIE.

However, a few documents are classed (usually by Central ERIC) as PRIORITY (Figure 4-4). Selection of these items for RIE is not up to the discretion of the Clearinghouses. They should be accessioned immediately and processed as quickly as possible. The PRIORITY Form should be left attached to the document throughout processing, to ensure its continued quick handling. All processing steps are observed, but are expedited. The Form indicates the issue of RIE in which the document must be included. Usually this is the very next issue still open to accessions. The speed that is necessary in processing can be determined from the ERIC Master Schedule, copies of which are sent to each Clearinghouse at the beginning of the year. Normally this will involve returning the document to the Facility in the next working week following receipt; however, in extreme cases 24-hour turnaround may be necessary to make the deadline. If for any reason, this specified schedule cannot be met, the Clearinghouse should notify the Facility.

4.3.9 Scope Overlap Sticker (Figure 4-3)

When the Facility is faced with a document whose subject matter overlaps the scope of two or more Clearinghouses, it must decide which Clearinghouse best seems to match the major thrust and emphasis of the document. The document is assigned for processing to this "prime" Clearinghouse. However, affixed to the cover is a sticker that informs the prime Clearinghouse of the other Clearinghouses that might feel they have a claim on the document Reproduced copies of the title page bearing the sticker are sent by the Facility to these alternative Clearinghouses. In this way, the alternative Clearinghouses are informed of a document that deals with their subject area and that they might even be in the process of requesting or using. If they question the assignment decision, they can call the "prime" Clearinghouse and negotiate the matter. The Clearinghouse actually receiving the document is likewise alerted that it should take into account the retrieval viewpoints of the other Clearinghouses during the indexing process. The ERIC Clearinghouse Scope of Interest Guide (Appendix C) is the principal tool used in determining these viewpoints.

4.3.10 Reply Cards (Acknowledgments to Contributors)

The Facility makes use of Reply Cards (Figure 4-6) to respond to document contributors who wish to be informed of the disposition (and ED number) of their documents. When the Clearinghouses receive documents from the Facility with Reply Cards attached to them, they should only detach and mail the self-addressed card if the document is rejected (citing the reason for rejection is optional). If the document is selected for RIE, the card should simply be left on the document. The Facility will mail the card to the contributor later, after the ED number has been assigned and recorded on the card.

Clearinghouses may make use of similar cards if they wish, simply be affixing them to the covers of documents. The cards should be fully addressed, titles supplied on the back, and stapled (back side up) at the top center of the document cover. The Facility will handle such Clearinghouse-affixed cards in the same way that it handles its own.

4.3.11 Inter-Clearinghouse Transfers

Any Clearinghouse may send a document directly to another Clearinghouse. This includes those documents received from the Facility, with the exception of PRIORITY documents, which should not be transferred because of the time factor.

Any Clearinghouse learning of a document that is being processed by another Clearinghouse, but which it feels should be processed by itself, is at liberty to contact the other Clearinghouse and negotiate for the document in question.

Clearinghouses should not discard good quality education-related documents just because they are not within their own scope of interest. Such documents should be routed to the cognizant Clearinghouse, or, if that is ambiguous or uncertain, to the Facility for a determination.

4.3.12 NIE/OE-Sponsored Reports

All NIE/OE-sponsored reports must be cleared by NIE/OE Project Officers before they can be processed. Normally the Clearinghouses receive such reports from the Facility; it can be assumed that these reports have been given clearance. Any NIE/OE contract/grant reports received from other sources must be cleared either by Central ERIC or the ERIC Facility before they can be processed. This clearance can be sought either by telephone or in writing (send copy of title page with request).

4.4 SHIPPING

The following procedures cover the logging, packing, wrapping, labeling, and shipping of materials from the ERIC Clearinghouses to the ERIC Facility and from the Facility to the Clearinghouses and other components of the system. Special instructions concerning the shipment of materials from the Clearinghouses to the CIJE Contractor are provided in Section 9.

4.4.1 Contents of Shipments

Clearinghouse to Facility

The principal materials sent from the Clearinghouses to the Facility are the accessioned documents intended for RIE announcement, ERIC Report Resumes for each document, log sheets for each package, and Descriptor Jusitifcation Forms (DJF's) for each new Descriptor being recommended.

Each ERIC Report Resume Form should be inserted in the document for which it is a surrogate. Descriptor Justification Forms may accompany the shipment to which they apply, or they may be sent separately in advance. Since Level III documents (not available from EDRS) are not required to be sent to the Facility, the Report Resume Form for such accessions should be accompanied by a reproduced copy of the Title Page and Contents Page (if one exists), to permit the editors to have something to check against.

In addition to RIE-related material, the Clearinghouse should send to the Facility one copy of every Information Analysis Product (IAP), newsletter, or other publication, for inclusion in the archival collection of Clearinghouse products maintained by the Facility.

Facility to Clearinghouse

The Facility sends a wide variety of materials to the Clearinghouses:

- Documents acquired through the Facility's Acquisitions Program
- Reproduced title pages of documents overlapping the scope of two or more Clearinghouses (Section 4.2.6)
- Duplicates, rejects, and other types of documents removed from a Clearinghouse's RIE shipment for one reason or another.
- Descriptor Justification Forms, showing final action
- Stickers and Labels necessary to process accessions, e.g., Reproduction Release Labels, NIE Policy Disclaimer Label
- Forms, e.g., ERIC Report Resume Form, Journal Article Resume Form, Descriptor Justification Form, Log Sheets, Acquisitions Data Input Form, Search Coding Form
- Support Publications, e.g., Title Index, Acquisitions Data Report, Thesaurus (Working Copy), Source Directory, Contract/Grant Number Index, Report/Project Number Index, Clearinghouse to ED Number Cross-Reference List, Source Postings and Statistics, etc.
- Computer Searches
- Informational and Advertising Brochures, e.g., How to Use ERIC, ERIC - A Profile, ERICTAPES/ERICTOOLS, RIE and CIJE Subscription Blanks
- Miscellaneous Distributions

  Current Topics in Education
  RIE Advance and Complimentary Distributions
  ERIC Information Analysis Products (annual bibliography)
  ERIC Processing Manual Revisions

In addition to the above, correspondence with the Clearinghouses on various matters is regular and voluminous.

4.4.2 Logging Shipments of Documents/Resumes for RIE

Every shipment of documents/resumes for RIE from the Clearinghouses to the Facility must be accompanied by a completed "Clearinghouse Accession Log Sheet" (Figure 4-12). Entries must be made in accession number sequence and the documents must be packed in the same sequence as logged. Clearinghouses must complete all parts of the form down to and including the box marked "Total (this page)":

- o Clearinghouse name
- o Date Logged
- o Signature of Logger
- o Total Accessions Logged on the Sheet and for each accession:
- o Clearinghouse Accession Number
- o Brief identification, usually author surname
- o Level (i.e., I, II, or III)
- o Any special comments

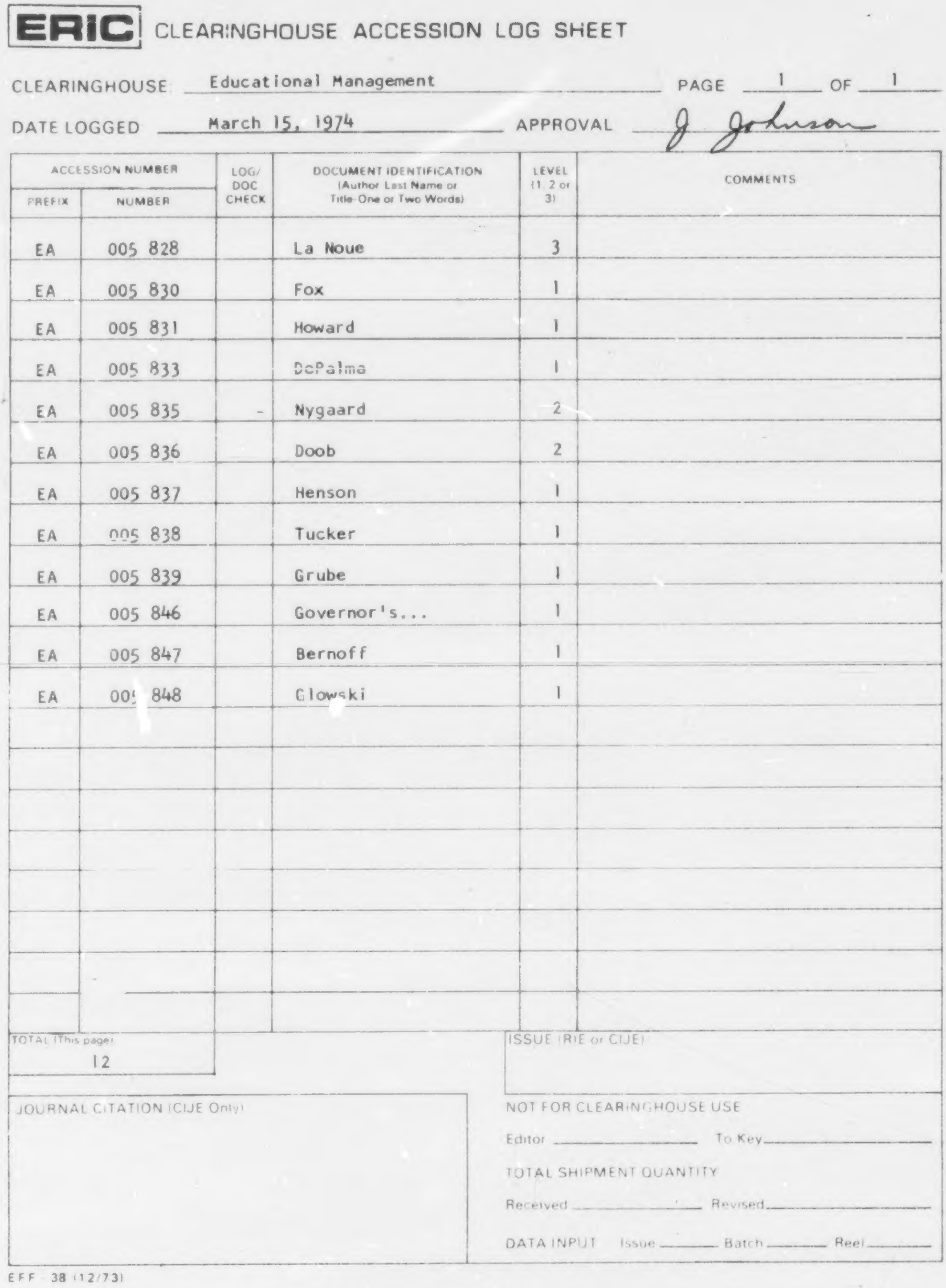
If only one Log Sheet is required for the shipment, indicate Page 1 of 1. If more than one is required, indicate the sheet number and the total sheets, e.g., Page 1 of 3, Page 2 of 3, Page 3 of 3. If more than one box is required for the shipment, the Log Sheets should be included in the first box and the boxes marked 1 of n 2 of n, etc.

Upon receipt at the Facility, the shipment and Log Sheet are checked against one another. If both are correct, the documents/resumes go forward for editing. In case of a discrepancy, the problem is resolved via telephone. The Clearinghouses should retain a copy of the Log Sheets for about three months for possible use in reconciliation.

4.4.3 Packing

Containers or boxes used for shipping should conform to regulations and limitations recommended or imposed by the Postal Service. The following limitations on the dimensions and weight of packages are cited for reference, with the reminder that they are subject to change:

Dimensions:	Not over 100 inches (length plus girth)
Weight:	Seventy (70) pounds maximum



ERIC CLEARINGHOUSE ACCESSION LOG SHEET

CLEARINGHOUSE Educational Management PAGE 1 OF 1

DATE LOGGED March 15, 1974 APPROVAL J Johnson

ACCESSION NUMBER		LOG/ DOC CHECK	DOCUMENT IDENTIFICATION (Author Last Name or Title-One or Two Words)	LEVEL (1, 2 or 3)	COMMENTS
PREFIX	NUMBER				
EA	005 828		La Noue	3	
EA	005 830		Fox	1	
EA	005 831		Howard	1	
EA	005 833		DePalma	1	
EA	005 835		Nygaard	2	
EA	005 836		Doob	2	
EA	005 837		Henson	1	
EA	005 838		Tucker	1	
EA	005 839		Grube	1	
EA	005 846		Governor's...	1	
EA	005 847		Bernoff	1	
EA	005 848		Glowski	1	

TOTAL (This page) 12

ISSUE (RIE or CIJE)

JOURNAL CITATION (CIJE Only)

NOT FOR CLEARINGHOUSE USE

Editor ________ To Key ________

TOTAL SHIPMENT QUANTITY

Received ________ Revised ________

DATA INPUT Issue ______ Batch ______ Reel ______

EFF-38 (12/73)

FIGURE 4-12
CLEARINGHOUSE ACCESSION LOG SHEET

Containers used should be strong enough to withstand normal handling during regular and air mail delivery. They should be water resistant to the extent that rain, spillage, and other such frequent occurrences will not damage the contents or undo the package. Tightly packed documents are their own best protection, so each container should be tightly packed, without using individual wrappings or envelopes on the documents. Empty space can be most economically filled with tightly packed crumpled newspaper. Whenever possible, a box size should be utilized which is not overlarge, but rather just large enough for the shipment.

4.4.4 Wrapping

Wrapping should be accomplished in accordance with Postal Service requirements. Paper packing tape should be used to adequately seal the package and avoid openings and interstices where other pieces of mail might lodge. Cellulose tape, wax, or other sealers should be avoided wherever postmark impressions are made (e.g., stamp area, flap intersections in the case of registered mail, etc.). If string or twine are used, they should be strong enough to do the job.

4.4.5 Labeling and Addressing

All packages must bear the complete names and addresses, including Zip Codes, of both sender and addressee. For the latest addresses of all network components, see Appendix G. Labels should be securely affixed. Preprinted labels may be used for consistency and convenience.

In the case of RIE material being shipped from a Clearinghouse to the Facility, the designation "ERIC MATERIAL" should appear on the label and on the left-hand corner of the labeled side of the package. If the shipment is composed of more than one box, each box should be marked to designate the proper sequence (e.g., 1 of 3, 2 of 3, 3 of 3).

4.4.6 Shipping Method

ERIC materials shipped from the Clearinghouses to the Facility via the Postal Service should be sent Certified Air Mail, unless otherwise directed. Commercial delivery services (such as United Parcel

Service or Railway Express Agency) may be used as long as the route involved is regularly served by the company. If a commercial service is used, the mode of transportation and handling most equivalent to Certified Air Mail should be selected.

4.4.7 Schedule

Shipping schedules for the Clearinghouses for the transmittal of RIE materials are established by Central ERIC and promulgated in the form of the ERIC Master Schedule that is distributed annually by the ERIC Facility. The current practice is to ship to the Facility every Friday whatever has been completed by that time. The Clearinghouses should make every effort to ship weekly in order to shorten the elapsed time between acquisition and announcement and to keep the workflow even throughout the system. There are occasionally, however, extenuating circumstances which will prevent weekly shipment and therefore weekly shipment is not absolutely mandatory. If the Facility fails to receive a shipment from a Clearinghouse for two weeks in succession, however, it contacts the Clearinghouse to determine the cause of the abstention.

4.4.8 Miscellaneous

EDRS Disposition of Original Documents

The disposition of original documents depends on the reproduction technique utilized by the ERIC Document Reproduction Service (EDRS). If hard copy reproduction is done via the microfiche, the original documents are not needed. However, if hard copy reproduction is done via the original document, then they must be retained by EDRS.

Beginning with the April 1971 RIE issue, ERIC microfiche were converted to the COSATI 98-frame standard from the earlier 60-frame standard. Hard copy reproduction prior to that issue is performed via the 60-frame microfiche; hard copy reproduction after that issue is currently done using the original document. This necessitates original document retention in an archival "Case File", and obviates the possibility of any alternate disposition, such as return to the Clearinghouse. Therefore, please do not request that any documents input to the system be returned after having been filmed.

SECTION OUTLINE

PAGE

5.1 INTRODUCTION 143

5.2 GENERAL RULES FOR COMPLETING THE REPORT RESUME PROCESSING FORM 144

5.3 RULES FOR SPECIFIC FIELDS 149

- 5.3.1 ERIC Accession Number 149
- 5.3.2 Clearinghouse Accession Number 149
- 5.3.3 Program Area Code 151
- 5.3.4 Publication Date 151
- 5.3.5 Issue 153
- 5.3.6 Copyright, Reproduction Release, Level of Availability 153
    - Level I Documents 154
        - Document Not Copyrighted 154
        - Document Copyrighted; Release Obtained 154
        - GPO documents
    - Level II Documents 155
        - Documents Copyrighted; Limited Release Obtained 155
        - Special Arrangements 156
        - PRIORITY Documents of Marginal Legibility 156
    - Level III Documents 157
        - Not Available from EDRS 157
        - Analytics 157
    - Partial Copyrights 157
    - NTIS Documents 158

PAGE

5.3.7 Personal Author 158

5.3.8 Document Title 161

- Main Title 161
- Fabricated Title 162
- Subtitles 162
- Report Statement 163
- Series Title 163
- Multi-Volume Documents 164
- Foreign Language Documents 164
- Conference Proceedings 165
- Selected Papers, Speeches, etc. 165
- Congressional Documents 165

5.3.9 Source Code and Name 166

5.3.10 Sponsoring Agency Code and Name 169

5.3.11 Contract Number 169

5.3.12 Grant Number 170

5.3.13 Project Control Number 171

5.3.14 EDRS Price 171

5.3.15 Report Number 173

5.3.16 Publication Type 177

5.3.17 Descriptive Note 177

- Pagination 179
  - Level I and II Documents 179
  - Level III Documents 180
- Resume Data Entry Format 180
- Other Descriptive Information 180
  - Papers, Speeches, Reprints 180
  - Dissertations and Theses 181
  - Language 181
  - Copyrighted Pages 181
  - Related Documents and Analytics 181
  - Marginal Legibility 182

PAGE

5.3.18 Availability 182

General Rules 182
Level I Alternate Availability 183
Level II Hard Copy Availability 183
Level III Availability 184
Resume Data Entry Format 184

5.3.19 Journal Citation 186

5.3.20 Descriptors 187

Indexing Depth 187
Major Descriptors 187
Resume Data Entry Format 188

5.3.21 Identifiers 188

Indexing Depth 189
Major Identifiers 189
Identifier Word Format 189
Resume Data Entry Format 189

5.3.22 Abstract 190

FIGURES

		PAGE
5-1	ERIC Report Resume Processing Form (Blank)	146
5-2	ERIC Character Set	147
5-3	ERIC Report Resume Processing Form (Completed Sample)	148
5-4	Clearinghouse Prefix Assignments	150
5-5	Program Areas and Codes	152
5-6	Publication/Document Types and Codes	178

DESCRIPTIVE CATALOGING

Summary of Significant Rules

1. Catalog from the document in hand. However, if the document is Level III, research into sources of availability is essential.

2. The principal authorities, that should be consulted to answer cataloging questions not covered by these guidelines, are the following:

   Standard for Descriptive Cataloging of Government Scientific and Technical Reports (COSATI, 1966, 50p. AD-641 092) (Appendix D)

   Anglo-American Cataloging Rules (ALA, 1967, 400 p.)

3. All cataloging should be recorded on the ERIC Report Resume Form (EFF-26). Use the front side of the form only. Do not use a second page! Information concerning maximum data permitted in each field is printed on the back of the form. In general, do not make handwritten corrections.

4. Hyphenation is not permitted at the end of a line.

5. The text of all fields should be entered in upper and lower case, as appropriate. Use only the 88 characters available in the ERIC Character Set, but do not use the Underline (_).

6. The Semicolon is used only as a subfield delimiter (to separate multiple Authors, Institutions, Descriptors, Report Numbers, etc., and to separate logical segments of certain fields, e.g., after Pagination, EDRS MF Price, Journal Name, etc.) in all fields except Title, Availability, and Abstract, where it can be used as a normal punctuation mark.

7. Pagination should be equivalent to the number of microfiche frames required to represent the document, with blank pages not being counted. Pagination is always the first entry in the Descriptive Note field.

8. If there is no Institution (Source) for a document, the Source Code (J) and Source Name (K) fields should both be left blank. The Corporate affiliation of the Personal Author should not be confused with the Institutional Source of the document, as they are not necessarily the same.

9. No more than two Personal Author names are permitted.

10. Only USOE and NIE Contract or Grant Numbers are cataloged. Contract/Grant Numbers of other agencies are ignored.

11. With rare exceptions, journal articles are to be announced only in CIJE.

12. Major Descriptors (identified by a preceding asterisk) are limited to five (5) per document. The maximum number of Descriptors is not limited but will depend on the nature of the document. Descriptors do not have to be listed in alphabetic or any other sequence.

13. Major Identifiers are limited to one (1) per document. The maximum number of Identifiers is not limited. Identifiers do not have to be listed in any sequence.

14. Abstracts are to be of the informative type, whenever the document type permits, and are limited in size to approximately 200 words.

5.1 INTRODUCTION

These guidelines for descriptive cataloging are intended for use as instructional information for Clearinghouses and others participating in the ERIC program. For any specific factors not detailed herein, the cataloger should consult the COSATI Standard for Descriptive Cataloging of Government Scientific and Technical Reports (See Appendix D). This document is also available as AD-641 092 from the National Technical Information Service, Springfield, Virginia 22151. (1966. 50 p.). For items not covered by COSATI, the cataloger may refer to the Anglo-American Cataloging Rules. This book is available from the American Library Association, 50 East Huron Street, Chicago, Illinois 60611. (1967. 400 p. $9.50).

Descriptive cataloging in the ERIC System describes the documents and provides tags for the production of indexes and for other forms of retrieval. The basic differences between traditional library cataloging and ERIC cataloging lie in the nature of the documents and in the method(s) of using the information. Traditional cataloging deals primarily with monographs (books) and serials (journals), while ERIC cataloging deals primarily with technical reports and similar fugitive materials. Further, in the library, the 3x5 catalog card is an end in itself. When duplicated and filed, it is the basic element of the retrieval system. In ERIC, on the other hand, the Report Resume Processing Form---which has a passing resemblance to the library catalog card---is only a transitional step in a process which ultimately leads to the addition of a record to a computer file. All subsequent ERIC products, in a wide variety of formats and media, are produced in whole or in part from this computer file, not from the Report Resume Processing Form.

The cataloger, therefore, must consider each field on the form as a distinct entity which most accurately tags the document on the basis of information given. This is another way of stating the basic rule of technical report cataloging---catalog from the document in hand. It is neither necessary nor desirable to seek additional information not contained in the document to "improve the cataloging". However, when a document is obviously one of a series, of which other members have been entered in the system, it is appropriate to check the other members to ensure consistency within the set.

5.2 GENERAL RULES FOR COMPLETING THE REPORT RESUME PROCESSING FORM

The new Report Resume Processing Form (EFF-26, Figure 5-1) is an extensive revision of the previous form (OE Form 6000), which incorporates as fully as possible suggestions made by the Clearinghouses. The goal sought in this design is an optimum balance of efficiency among the several users of the form: document analysts in the Clearinghouses; Facility editors; and keyboarding staff, rather than an ideal format for any one group. Stock of this form may be obtained from the ERIC Facility.

5.2.1 Description of the Form

The form is printed on 8½ x 11 paper in blue ink. The lines which delimit the various fields and the field and line identification characters have been screened in processing, so that the keywords (which serve to identify the fields as well as provide the tags by which the computer can distinguish the various data elements) stand out, as will information typed on the form. The ink and screening have been selected so that the form can be reproduced on standard office copiers such as Xerox, IBM, etc.

The vertical and horizontal spacing on the form have been rigidly controlled so that if the form is properly aligned for entering the data on the first line, the remainder of the form can be completed without adjusting the carriage or the paper. This applies to both Pica (10-pitch) and Elite (12-pitch) typewriters with line spacing of six (6) lines to the inch. It does NOT apply to IBM Executive or similar typewriters. Short tick marks at the right and left of each block indicate the line spacing.

The left margin is provided for Facility editorial notes. It also leaves room for punching holes in order to file resumes in ring binders. The principal purpose of the deep bottom margin is the avoidance of slippage in the typewriter when typing at the bottom of the abstract field. It also provides additional space for corrections or occasional overflows.

For ready reference, the reverse of the form carries a table of the various fields, with their full names, keywords, examples of typical data, and notes.

5.2.2 Rules for Entry of Data

Rule 1 - Begin data entry as close to the underline at the end of the keyword as practical, and DO NOT OVERRUN THE SPACE PROVIDED ON THE FORM FOR EACH FIELD. Where exceptions are permitted, they are discussed in the specific rules.

Rule 2 - DO NOT HYPHENATE AT THE END OF A LINE. The computer system identifies words by the occurrence of a space, and it automatically inserts a space after the last character in each line (i.e., the carriage return generates a space), so if "re-" ends a line and "trieve" begins the next, the data appears in the record as "re- trieve".

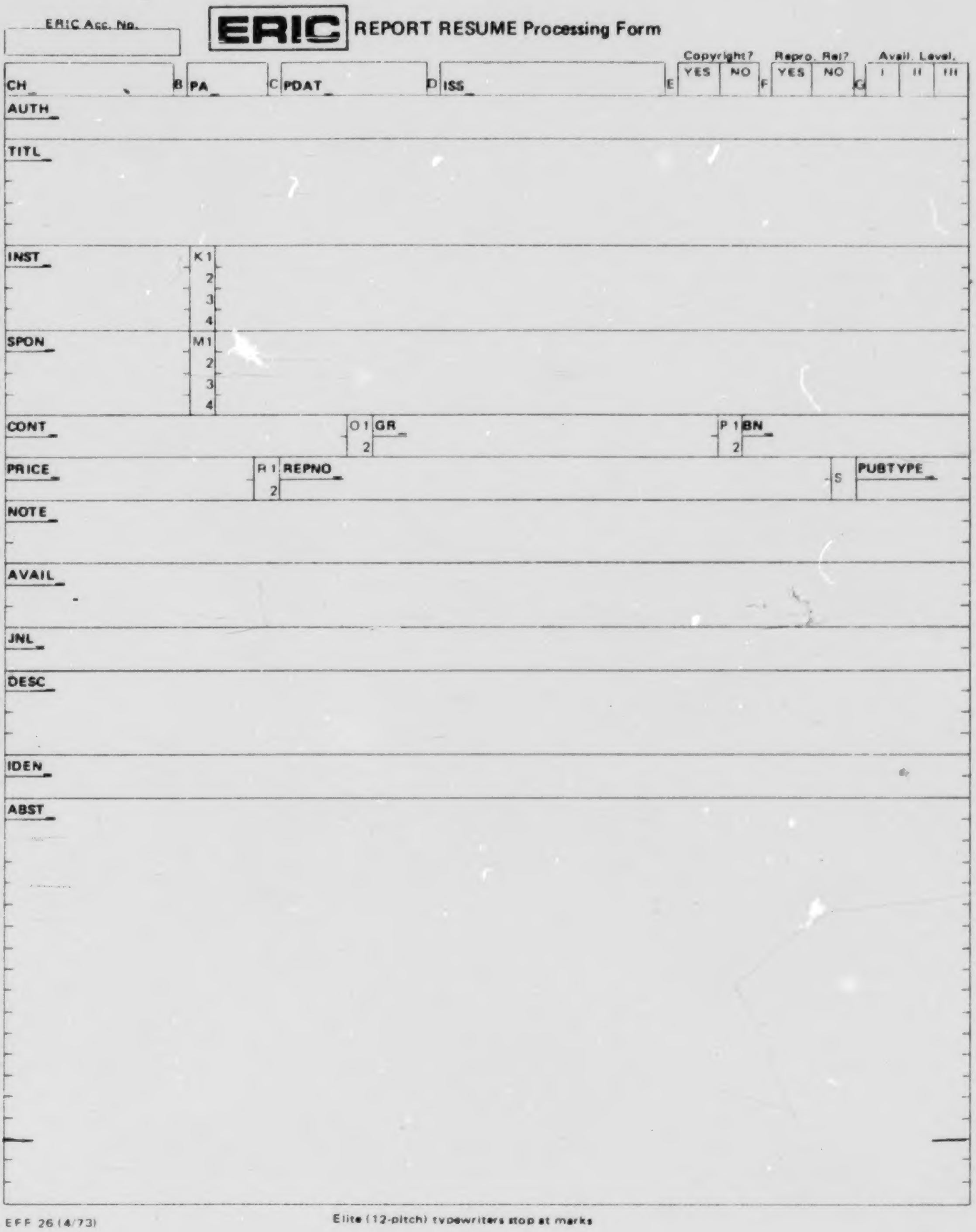
Rule [illegible] - USE ONLY CHARACTERS AVAILABLE IN THE ERIC CHARACTER SET (FIGURE 5-2). ERIC characters not available on your typewriter, e.g., square brackets, may be entered by hand, provided they are neatly and clearly entered.

Rule 4 - USE THE SEMICOLON (;) ONLY AS A DELIMITER (i.e., SUBFIELD SEPARATOR) IN ALL FIELDS EXCEPT TITLE, AVAILABILITY, AND ABSTRACT. Within the Title (TITL_), Availability (AVAIL_), and Abstract (ABST_) fields, the semicolon is used in the normal fashion.

Rule 5 - DO NOT TRANSMIT RESUMES TO THE FACILITY WITH HANDWRITTEN CORRECTIONS. Corrections on final copy should be made by erasure, correction fluid or tape, and retyping. (Exceptions may be made in minor cases involving punctuation and in cases involving special characters not on the keyboard).

Rule 6 - DO NOT USE UNDERLINE (_) in ANY FIELD. The underline always identifies the preceding characters as a keyword denoting a new field of data

Figure 5-3 is a sample of a completed resume form.



ERIC Acc. No.

ERIC REPORT RESUME Processing Form

Copyright? YES NO
Repro. Rel? YES NO
Avail. Level. I II III

A CH_ B PA_ C PDAT_ D ISS_ E F G
H1 AUTH_
2
I1 TITL_
2
3
4
5
J1 INST_ K1
2 2
3 3
4 4
L1 SPON_ M1
2 2
3 3
4 4
N1 CONT_ O1 GR_ P1 BN_
2 2 2
Q PRICE_ R1 REPNO_ S PUBTYPE_
2
T1 NOTE_
2
3
U1 AVAIL_
2
3
V1 JNL_
2
W1 DESC_
2
3
4
X1 IDEN_
2
Y1 ABST_
2
3
4
5
6
7
8
9
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19

EFF 26 (4/73)
Elite (12-pitch) typewriters stop at marks

FIGURE 5-1
ERIC REPORT RESUME PROCESSING FORM (BLANK)

All Alphabetics - A-Z (Upper Case)

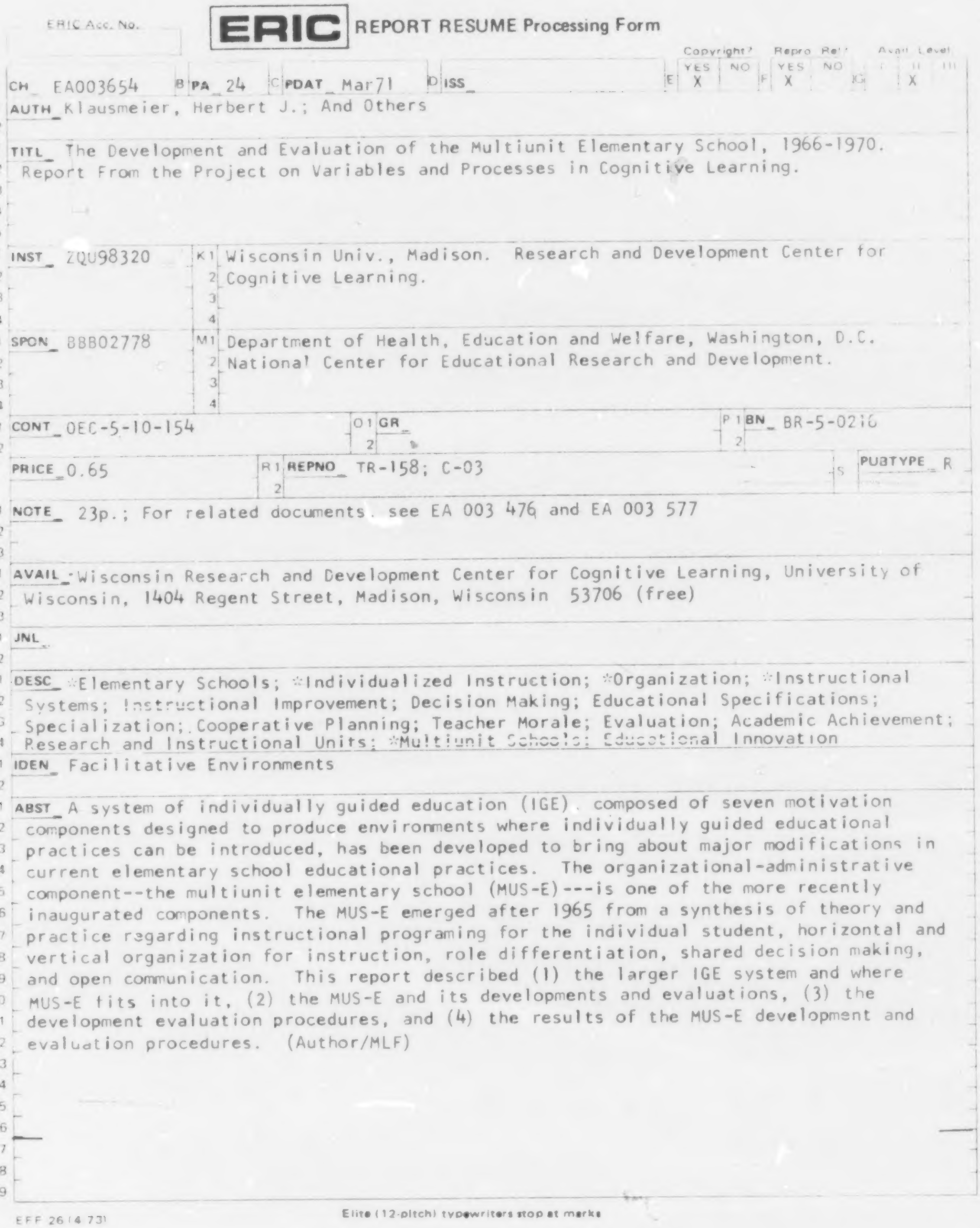
All Alphabetics - a-z (Lower Case)

Numerics - 0-9

Special Characters - (Listed Below)

&	ampersand
'	apostrophe
*	asterisk
	blank space
[	bracket (left)
]	bracket (right)
:	colon
,	comma
--	dash (two hyphens)
$	dollar sign
=	equals
!	exclamation point
>	greater than
<	less than
-	hyphen
(	parenthesis (left)
)	parenthesis (right)
%	percent
.	period
+	plus sign
#	pound sign
?	question mark
"	quotation mark
;	semicolon
/	slash, virgule

FIGURE 5-2
ERIC CHARACTER SET



ERIC Acc. No.

ERIC REPORT RESUME Processing Form

A **CH**_ EA003654 B **PA**_ 24 C **PDAT**_ Mar71 D **ISS**_

	Copyright?			Repro Rel?			Avail Level		
	YES	NO		YES	NO		I	II	III
E	X		F	X		G		X	

H1 **AUTH**_ Klausmeier, Herbert J.; And Others

I1 **TITL**_ The Development and Evaluation of the Multiunit Elementary School, 1966-1970. Report From the Project on Variables and Processes in Cognitive Learning.

J1 **INST**_ ZQU98320 K1 Wisconsin Univ., Madison. Research and Development Center for Cognitive Learning.

L1 **SPON**_ BBB02778 M1 Department of Health, Education and Welfare, Washington, D.C. National Center for Educational Research and Development.

N1 **CONT**_ OEC-5-10-154 O1 **GR**_ P1 **BN**_ BR-5-0216

Q **PRICE**_ 0.65 R1 **REPNO**_ TR-158; C-03 S **PUBTYPE**_ R

T1 **NOTE**_ 23p.; For related documents see EA 003 476 and EA 003 577

U1 **AVAIL**_ Wisconsin Research and Development Center for Cognitive Learning, University of Wisconsin, 1404 Regent Street, Madison, Wisconsin 53706 (free)

V1 **JNL**_

W1 **DESC**_ *Elementary Schools; *Individualized Instruction; *Organization; *Instructional Systems; Instructional Improvement; Decision Making; Educational Specifications; Specialization; Cooperative Planning; Teacher Morale; Evaluation; Academic Achievement; Research and Instructional Units; *Multiunit Schools; Educational Innovation

X1 **IDEN**_ Facilitative Environments

Y1 **ABST**_ A system of individually guided education (IGE), composed of seven motivation components designed to produce environments where individually guided educational practices can be introduced, has been developed to bring about major modifications in current elementary school educational practices. The organizational-administrative component--the multiunit elementary school (MUS-E)---is one of the more recently inaugurated components. The MUS-E emerged after 1965 from a synthesis of theory and practice regarding instructional programing for the individual student, horizontal and vertical organization for instruction, role differentiation, shared decision making, and open communication. This report described (1) the larger IGE system and where MUS-E fits into it, (2) the MUS-E and its developments and evaluations, (3) the development evaluation procedures, and (4) the results of the MUS-E development and evaluation procedures. (Author/MLF)

EFF 26 (4 73)

Elite (12-pitch) typewriters stop at marks

FIGURE 5-3
ERIC REPORT RESUME PROCESSING FORM (COMPLETED SAMPLE)

5.3 RULES FOR SPECIAL FIELDS

The following paragraphs are identified by the name of the field, the keyword (where appropriate) and the Field identification character shown on the form.

5.3.1 ERIC Accession Number

LEAVE THIS FIELD BLANK ON RESUMES TRANSMITTED TO THE FACILITY. The ERIC accession number (in the format ED 012 345) is computer-assigned during final processing at the Facility. This field is provided on the resume primarily for use by the Clearinghouses who may wish to enter the ED number on retained copies of the resume after the announcement appears in RIE.

The ERIC accession number serves several purposes:

a. An address tag for computer storage and retrieval,

b. A physical location address for shelf storage of documents,

c. An index-to-resume connector for announcement media,

d. An order number for acquiring microfiche or hard copy from EDRS.

5.3.2 Clearinghouse Accession Number (CH_) (Field A)

This number is assigned by the Clearinghouse during input processing, using the assigned two-character alphabetic prefix, which distinguishes the Clearinghouse, followed by six numeric characters (See Figure 5-4 for prefix assignments). This number provides identification by Clearinghouse for each record and an in-process control number. The Clearinghouse accession number is entered in packed form and without spaces, as shown below:

A CH_ AC012345

AA - ERIC Facility Contractor (series discontinued with March 1973 RIE)

AC - Adult Education (merged into CE in 1973)

AL - Linguistics (merged into FL in 1971)

CE - Career Education

CG - Counseling and Personnel Services

CS - Reading and Communication Skills

EA - Educational Management

EC - Handicapped and Gifted Children

EF - Educational Facilities (merged into EA in 1970)

EM - Educational Medial and Technology (merged into IR in 1974)

FL - Languages and Linguistics

HE - Higher Education

IR - Information Resources

JC - Junior Colleges

LI - Library and Information Sciences (merged into IR in 1974)

PS - Early Childhood Education

RC - Rural Education and Small Schools

RE - Reading (merged into CS in 1972)

SE - Science, Mathematics, and Environmental Education

SO - Social Science/Social Studies

SP - Teacher Education

TE - Teaching of English (merged into CS in 1972)

TM - Tests, Measurement, and Evaluation

UD - Disadvantaged

VT - Vocational and Technical Education (merged into CE in 1973)

FIGURE 5-4
CLEARINGHOUSE PREFIX ASSIGNMENTS

5.3.3 Program Area Code (PA_) (Field B)

For documents reporting on research funded by the Office of Education or by the National Institute of Education, this two-digit numeric code identifies the legislative authority under which the project was funded. All such documents should have an entry in this field. Where the legislative authority cannot be determined by examination of the document, enter the code for Other (95). The currently authorized codes and the corresponding legislative authorities are listed in Figure 5-5. The Program Area Code is entered as shown below:

B **PA_** 12

5.3.4 Publication Date (PDAT_) (Field C)

The publication date of the document should be entered with as much precision as the information in the document permits. If no publication date, as such, appears in the document, the following may be used, in order of preference:

Date Work Completed
Date Submitted
Copyright Date (Latest)

Publication date is entered in one of the following formats ONLY:

C **PDAT_** 5May73   C **PDAT_** 14May73   C **PDAT_** May73   C **PDAT_** 73

DO NOT LEAVE BLANKS OR SUPPLY ZEROS FOR MISSING INFORMATION.

USE ONLY THE FOLLOWING THREE-CHARACTER ABBREVIATIONS FOR THE MONTHS:

Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec

If the publication date is determined by the cataloger by inference, or from information not in the document, enclose the supplied date in square brackets, as follows:

C **PDAT_** [4May73]   C **PDAT_** [May73]   C **PDAT_** [73]

CODE	PROGRAM AREA
08	Adult and Vocational Education, PL 88-210
16	Captioned Films for the Deaf, PL 85-905
24	Cooperative Research, PL 89-10, Title IV
32	Disadvantaged Students Program, PL 89-10, Title I
40	Handicapped Children and Youth, PL 88-164
48	Language Development, PL 85-864, Title VI
52	Library Research and Development, PL 89-320, Title III, Part B
56	New Educational Media, PL 85-864, Title VII, Part A
64	New Educational Media, PL 85-864, Title VII, Part B
72	Research in Foreign Countries, PL 83-480
80	State Educational Agencies Experiment Activities, PL 89-10, Title V, Section 505
88	Supplementary Centers and Services, PL 88-10, Title III
95	Other Office of Education and National Institute of Education Programs (Projects for which the legislative authority cannot be determined are included here).

FIGURE 5-5
PROGRAM AREAS AND CODES

DO NOT use entries such as: 1973, Win73, Spr73, etc. If no date is determinable, LEAVE THE FIELD BLANK.

5.3.5 Issue (ISS_) (Field D)

LEAVE THIS FIELD BLANK ON RESUMES TRANSMITTED TO THE FACILITY. This information will be entered by the Facility during edit.

5.3.6 Copyright, Reproduction Release, Level of Availability (Fields E, F, & G)

These three fields are treated as a unit because their entries are interdependent. Documents are entered into the ERIC system and announced in RIE at one of three levels of availability, which determine whether and to what extent they can be reproduced by the ERIC Document Reproduction Service. These levels, in turn depend upon the copyright status of the document and the kind of release granted by the copyright holder.

Ideally, all documents announced in RIE would be available from EDRS, and Clearinghouses should make every reasonable effort to achieve this goal. However, it must be recognized that this goal must be subordinated to the goal of providing the widest possible coverage of the field of education by RIE and the ERIC data base. Therefore, Clearinghouses should not allow their inability to obtain a complete reproduction release---or any release at all---to deter them from entering significant documents into the system, PROVIDED AN ALTERNATE SOURCE CAN BE CITED. Announcement of documents which are completely unobtainable only produces frustration in the user and wastes money and effort.

If a document is copyrighted (and not produced by a commercial publisher), the Clearinghouse should seek a reproduction release from the copyright holder, preferably before initiating processing. When such a release is obtained, the Clearinghouse must:

- o AFFIX THE APPROPRIATE RELEASE NOTICE TO THE TITLE PAGE AND ENTER THE COPYRIGHT HOLDER'S NAME;
- o RETAIN THE ORIGINAL RELEASE ON FILE INDEFINITELY.

The following paragraphs discuss the various levels of availability, the kinds of documents processed at each level, and the entries on the resume form for each.

Level I Documents - Microfiche and Hard Copy from EDRS

Documents announced at Level I fall into one of three subclasses, as described below:

Document Not Copyrighted

These are documents which do not carry a copyright notice or other restriction on reproduction. The entries on the resume form should be made as in this example:

	Copyright?			Repro. Rel?			Avail. Level.		
E	YES	NO	F	YES	NO	G	I	II	III
		X			X		X		

Document Copyrighted; Full Release Obtained

These are documents which carry a copyright notice or other limitation on reproduction, and for which the Clearinghouse has on file a release from the copyright holder granting permission for ERIC to reproduce the document in BOTH microfiche and hard copy. Such documents MUST have a release statement, INCLUDING THE COPYRIGHT HOLDER'S NAME, affixed to the title page or cover, as follows:

PERMISSION TO REPRODUCE THIS COPYRIGHTED MATERIAL HAS BEEN GRANTED BY

Jane Doe

TO ERIC AND ORGANIZATIONS OPERATING UNDER AGREEMENTS WITH THE NATIONAL INSTITUTE OF EDUCATION. FURTHER REPRODUCTION OUTSIDE THE ERIC SYSTEM REQUIRES PERMISSION OF THE COPYRIGHT OWNER

PERMISSION TO REPRODUCE THIS COPYRIGHTED MATERIAL HAS BEEN GRANTED BY

New York Times Co.

TO ERIC AND ORGANIZATIONS OPERATING UNDER AGREEMENTS WITH THE NATIONAL INSTITUTE OF EDUCATION. FURTHER REPRODUCTION OUTSIDE THE ERIC SYSTEM REQUIRES PERMISSION OF THE COPYRIGHT OWNER

NOTE: These stickers are supplied by the ERIC Facility on request.

The entries on the resume form should be made as follows:

	Copyright?			Repro. Rel?			Avail. Level.		
E	YES	NO	F	YES	NO	G	I	II	III
	X			X			X		

Government Printing Office (GPO) Documents

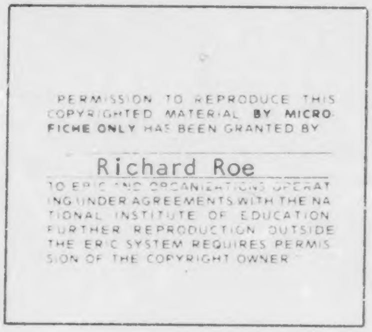
These documents are announced at Level I to ensure continued availability after they go out of print at GPO. Entries on the resume form should be made in the same way as for uncopyrighted documents. GPO AVAILABILITY IS ALSO CITED (See 5.3.18).

Level II Documents - Microfiche Only From EDRS

Documents announced at Level II fall into one of three subclasses, as described in the following paragraphs. Where possible, a source for hard copy should be cited.

Document Copyrighted; Limited Release Obtained

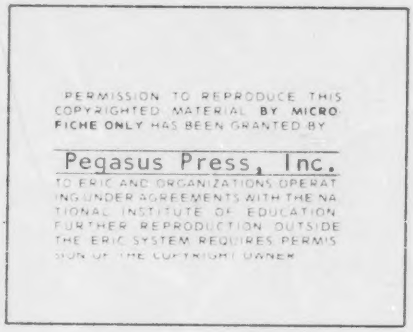
These are documents which carry a copyright notice, or other limitation on reproduction, and for which the Clearinghouse has on file a release from the copyright holder granting permission for ERIC to reproduce the document in microfiche only. Such documents MUST have a release statement, INCLUDING THE COPYRIGHT HOLDER'S NAME, affixed to the title page or cover, as follows:



PERMISSION TO REPRODUCE THIS COPYRIGHTED MATERIAL **BY MICROFICHE ONLY** HAS BEEN GRANTED BY

Richard Roe

TO ERIC AND ORGANIZATIONS OPERATING UNDER AGREEMENTS WITH THE NATIONAL INSTITUTE OF EDUCATION FURTHER REPRODUCTION OUTSIDE THE ERIC SYSTEM REQUIRES PERMISSION OF THE COPYRIGHT OWNER



PERMISSION TO REPRODUCE THIS COPYRIGHTED MATERIAL **BY MICROFICHE ONLY** HAS BEEN GRANTED BY

Pegasus Press, Inc.

TO ERIC AND ORGANIZATIONS OPERATING UNDER AGREEMENTS WITH THE NATIONAL INSTITUTE OF EDUCATION FURTHER REPRODUCTION OUTSIDE THE ERIC SYSTEM REQUIRES PERMISSION OF THE COPYRIGHT OWNER

NOTE: These stickers are supplied by the ERIC Facility on request.

The entries on the resume form should be in accordance with the following example:

	Copyright?			Repro. Rel?			Avail. Level.		
	YES	NO		YES	NO		I	II	III
E	X		F	X		G		X	

Special Arrangements

ERIC has arranged blanket releases with certain organizations for Level II processing of their documents. For example, publications which are sold by NEA (or its affiliates or associates) are announced at Level II. They carry the standard Level II Release Statement sticker and resume entries as shown above. The organizations currently involved in special Level II processing arrangements are as follows:

Association for Supervision and Curriculum Development
Council of Europe (Sales publications)
National Art Education Association
National Association of Elementary School Principals
National Education Association
National School Public Relations Association
Organization for Economic Cooperation and Development
(Special conditions, see Figure 2-13.)

These arrangements are summarized and kept up-to-date in Section 2, Figure 2-13.

Priority Documents of Marginal (But Acceptable) Reproduction Quality

These are either PRIORITY documents (see Appendix B for definition) received from the ERIC Facility bearing the stamp "Best Available Copy", or they are ROUTINE documents classed by the selection criteria as mandatory input, e.g., Clearinghouse information analysis products. (In such cases, a microfiche achieves preservation of the basic record at relatively low cost; the much higher cost of a hard copy reproduction requires a corresponding higher level of legibility in order to be publicly acceptable as a commercial product).

	Copyright?			Repro. Rel?			Avail. Level.		
	YES	NO		YES	NO		I	II	III
E		X	F		X	G		X	

In all such cases, an explanatory note relating to the unavailability of hard copy must be added to the Descriptive Note (See 5.3.17).

Level III Documents - Not Available from EDRS

These are copyrighted documents (or documents whose reproduction has otherwise been limited or controlled) for which no reproduction release has been obtained. The resume entries should be made as follows:

	Copyright?			Repro. Rel?			Avail. Level.		
	YES	NO		YES	NO		I	II	III
E	X		F		X	G			X

If a document is announced at Level III, an alternate source MUST be cited in the Availability Field (See 5.3.18).

Treatment of "Analytics"

When a document is given "analytic" treatment (that is, when both the entire document and individual sections of it are entered into the system separately), the section that is separately analyzed should be entered at Level III, but if the basic "parent" document is available from EDRS, a note to that effect should be entered, for the benefit of users, in the Availability Field (See 5.3.18) of the analyzed part. The "parent" document should likewise carry a Descriptive Note (See 5.3.17) identifying any of its parts that have been separately analyzed.

Partial Copyrights

If only a portion of a document is copyrighted, and release cannot be obtained, the document may be announced at Level I, PROVIDED:

- The copyrighted pages are removed and excluded from the pagination count.

- o A note is entered in the Descriptive Note Field (See 5.3.17 for format).

- o The utility of the documents is not seriously diminished by the removal of the copyrighted pages.

NTIS Documents

Documents available from the National Technical Information Service (NTIS) are processed at either Level I or Level III, depending upon the form of the document IN HAND for processing.

Original PRINTED Copy (Level I)

If the Clearinghouse has an original PRINTED copy of the document, as issued by the originating organization, it will be processed at Level I. The NTIS availability should be cited in the Availability field (See 5.3.18).

Microfiche or Reproduced Paper Copy (Level III)

If the Clearinghouse has only a microfiche or reproduced paper copy of an NTIS document, it will be processed at Level III, and the NTIS availability cited (See 5.3.18).

Other Fields Affected

The entries in the Copyright, Reproduction Release, and Level of Availability fields must be consistent with entries in the EDRS Price (5.3.14), Availability (5.3.18), and Descriptive Note (5.3.17) fields.

5.3.7 Personal Author(s) (AUTH_) (Field H)

The entry(ies) in this field should be the name(s) of the person(s) who performed the research and/or wrote the report. If the personal author(s) is (are) not clearly identified by a word such as, "Author(s)" or "By", the entry should be determined by selecting a name(s) from the cover, title page, or elsewhere in the report, in the following order of precedence:

(1) Unaccompanied by any qualifying words, but by location, may be assumed to be the author(s) of the document.

(2) Identified as the person(s) preparing the document.

(3) Identified as compiler(s) or editor(s).

(4) Identified as person(s) submitting the document.

(5) Identified as the principal investigator(s).

Unless there are other indications that the individual is, in fact, a personal author, omit the author entry if the only person identified is: the project manager; the director or chairman of the group doing the work; the school district superintendent; or the school principal. For example, a superintendent whose name/title automatically appears on the cover or title page of every publication of a school system, should not be interpreted as being the author of every otherwise anonymous such publication. Leave the field blank if no author is identified.

Rules for Entering Personal Authors

- Enter personal author names in full (to the extent available), with the last name first, followed by a comma, space, the first name (or initial), space, and the middle initial (or initials, or name). If only initials are available from the document, use the two initials. DO NOT attempt to research a first name.
- Omit titles, degrees, and other honorifics. However, in the case of religious order bynames, when that is the only name available, add the vernacular title to the byname, e.g., Mary Jeremy, Sister.
- Omit names of translators.
- If the "author(s)" are identified as editor(s) or compiler(s), add a comma and the abbreviation(s), "Ed." or "Comp.", as appropriate.
- DO NOT use brackets to identify supplied information or set off editor or compiler notations.
- No more than two entries are permitted.
- The second entry should be preceded by a semicolon (;).

- If there are more than two (2) authors, the first entry should be the principal author, and the second should be "And Others".

Examples of Author Entries

Single Author

H1 AUTH_ Harmon, Edward J.
2

H1 AUTH_ Mary Jeremy, Sister
2

H1 AUTH_ Saunders, Jack O. L.
2

H1 AUTH_ Adams, J. Mack
2

Two (2) Authors)

H1 AUTH_ Burns, James F.; Harris, Walter T.
2

Three (3) or More Authors

H1 AUTH_ Stander, Lewis M.; And Others
2

Editor Entries

H1 AUTH_ Wilson, Jon F., Ed.
2

H1 AUTH_ LaFevre, Louise V., Ed.; Morris, Sheldon W., Ed.
2

Compiler Entries

H1 **AUTH_** Davis, Harriet A., Comp.
2

H1 **AUTH_** Aaronson, Jeanette K., Comp.; Healy, George W., Comp.
2

5.3.8 Document Title (TITL_) (Field I)

The Title Field will contain the complete title of a document, including alternative title, subtitle, and other associated descriptive matter usually found preceding the author, edition or imprint statement on the title page. Subtitles and other descriptive matter are described below, with specific rules for their transcription.

There may be a rare instance when a title, subtitle, and report statement could overrun the allotted space for this field. If this should occur, the title should be truncated at a logical breaking point.

Main Title

The complete document title, as found on the title page, is entered. If the title page of the document is lacking, the cover title must be used as a second choice. In the case of the somewhat informal report literature, the cover and title page are frequently the same piece of paper, in which case there is no problem. However, it also happens on occasion (because of this same informality) that the title appearing inside the document (for example, at the top of the first page of text) varies from the title appearing on the outside cover of the document. In these cases, the cataloger must decide whether the outside cover should in fact be considered the official title page. This will usually depend on the extent of other bibliographic data presented on the page, e.g., Author, Institution, Date of Publication, etc. If the cover does include most of the important data, and is obviously the determiner of the way the document is likely to be known and identified, then there is no problem. However, if the cover is clearly a brief non-substantive eye-catcher, at variance with an internal fully descriptive title, then the standard library practice of relying on title page over cover should be followed. This question of cover vs. title page is not an easy one and guidelines are difficult because of the large number of troublesome variations that can be met with. A helpful discussion of Title-selection problems can be found in the Anglo-American Cataloging Rules, Introductory Notes (p. 9) and Sections 32 and 33 (p. 193-196). A typical example of a title is shown below:

```
1 TITL    Creative Involvement With the Media.
2
3
4
5
```

Fabricated Title

If no title can be found, it may be fabricated on the basis of an examination of the document. The table of contents, chapter headings and conclusions can be helpful in supplying a title. When a title is fabricated, it MUST be enclosed in brackets. An example is shown below:

```
1 TITL  [NUEA Correspondence Study, A Survey Questionnaire and Summary of Replies.]
2
3
4
5
```

Subtitle

The subtitle is considered a part of the title and transcribed in the entry in the same manner as the title proper. A subtitle preceding the title on the title page is transposed to follow the main title. Care must be exercised not to interpret a series statement or other data at the head of the title as a subtitle.

A semicolon is generally used to separate title from subtitle or alternative title, but either a comma, a colon, or a period may sometimes be preferred. The colon can be used if there is doubt as to whether there is in fact a subtitle or whether the entire statement should be considered to be the title proper. Punctuation of the title is often a subjective process largely dependent on how the cataloger interprets the title. The general rule for recording of the title, as given by the Anglo-American Cataloging Rules (Section 133A), is "The title...is transcribed exactly as to order, wording, spelling, accentuation, and other diacritical marks (if possible) but not necessarily as to punctuation and capitalization".

A Title-subtitle example is shown below:

TITL Computer-Aided Research in Machine Translation D199; A Parsing Procedure for a Vector-Symbol Phrase Grammar of Russian.

Report Statement

Information relating to the type of report, and data such as volume and part numbers, is considered as part of the title and is entered as shown in the following examples:

TITL Essex County College Cost Fact-Finding Committee. Final Report.

TITL A Study of Innovations in California Junior College Evening Divisions. Part III.

TITL Mexican-American Study Project. Revised Prospectus and Interim Report.

Series Title

A series is a number of separate works issued in succession, and related to one another by the fact that each bears a collective title (generally appearing at the head of the title page). They are normally issued by the same publisher or institution, in a uniform style, and are frequently in a numerical sequence. A document issued in several parts or volumes with the same title is NOT considered a series.

The series title should generally be entered following the specific title of the document. Care must be exercised in distinguishing it from other descriptive information relating to the document.

The series statement includes: the distinctive collective title; and, in a numbered series, the number of the particular document, as in the examples below:

TITL_ A Report on the Low Ability Student at Miracosta College. Student Personnel Studies, Section G.

TITL_ Facilitating Learning and Individual Development, Toward a Theory for Elementary Guidance. Minnesota Guidance Series.

Multi-Volume (Part) Documents

If a document is issued in several parts or volumes under one title, enter under the main title and add the part or volume number and the distinctive title of the document, as in the example below:

TITL_ A Potpourri of Ideas for Teachers of the Mentally Retarded. Volume II, The Practical Arts.

Foreign Language Documents

If a document is printed in a foreign language, enter the Main Title in the language of the document. Enter the English translation in parentheses following the foreign title, as in the following example:

TITL_ Lecciones de Quechua. Primer Nivel, Segundo Nivel (Quechua Lessons. First Level, Second Level).

If the document is printed in Cyrillic (Russian) characters, transliterate the title into Roman characters in accordance with ISO R9-1968, International System for the Transliteration of Slavic Cyrillic Characters (2nd Edition), available from The American National Standards Institute, 1430 Broadway, New York, New York 10018, $4.20.

Conference Proceedings

When the entire proceedings of a conference, workshop, seminar, etc. are entered, the title should be taken verbatim from the title page, except that the number of a conference appearing in the title should be removed from its position and placed in parentheses after the title, as shown in the following example:

TITL_ Summary of the Proceedings of the Working Conference on Language Development in Disadvantaged Children (3rd).

When the data and/or place of the conference also appear in the title, or are clearly indicated on the title page, they should also be removed and included in the parentheses in the order: number; place; date, as shown in the following example:

TITL_ Proceedings of the Annual Foreign Language Conference (31st, New York University, November 13, 1965).

Selected Papers, Speeches, etc.

When individual papers or speeches (as opposed to complete conference proceedings) are being entered into the system, all descriptive information relating to the conference or meeting at which the paper or speech was presented will be entered in the Descriptive Note field (See 5.3.17).

Congressional Documents

Hearings and Reports of the Senate and House of Representatives and their Committees should include in the Title field information as to the number and session of the Congress, as shown in the following example:

TITL_ Higher Education Amendments of 1971; Hearings Before the Special Subcommittee on
Education of the Committee on Education and Labor, House of Representatives,
Ninety-Second Congress, First Session. Part 1 and Part 2.

5.3.9 Source Codes (INST_) (Field J) and Names (Field K)

The corporate author or institution is the organizational source of the document. Governments and their agencies, societies, institutions, universities, firms, foundations, and those conferences which are clearly indicated as incorporated will be entered as corporate sources when they, as corporate bodies, are responsible for the production or issuance of a document. The entry of a corporate source indicates responsibility for the issuance of the document; it is NOT to be confused with the address of the personal author entered in the Author field, i.e., the personal author's corporate affiliation is not necessarily equivalent to the corporate source. This issue arises most frequently in the case of personal speeches or conference presentations. No institutional source should, for example, be cataloged for a conference paper written by John Doe of the University of Texas when there is no indication that the release of the paper was formally controlled or supported by the University. Similarly, a Doctoral dissertation or Master's thesis should not be cataloged with the recipient institution as the institutional source. Likewise, commercial publishing companies, college/university presses, the GPO, etc., are not shown as institutional sources when acting merely as publishing agents for works that have normal personal or corporate authors. In such cases, the publisher's name, address, and price are appropriately cataloged in the Availability field (See 5.3.18). A commerical publisher can, however, be a corporate author when they are responsible for the actual preparation of a work, e.g., Marquis, Inc., is the corporate source for the reference work Who's Who in the East.

Use of the ERIC Source Directory

In order to ensure that the same institution is always cited in the same fashion and to permit ready assembly of consistent indexes, all institutional names (corporate authors, sponsoring agencies, etc.) used in the ERIC system are carefully constructed in accordance with the COSATI standard (Standard for Descriptive Cataloging of Government Scientific and Technical Reports (See Appendix D), and are assigned a unique code. Thereafter, the institutional name is entered into the system by specifying the appropriate code; during computer entry of the resumes, the system extracts the name from the Source File on the basis of the code and adds it to the resume in its standardized form.

Copies of the ERIC Source Directory, a cumulative alphabetical list of all institutional names used in the ERIC system, together with their codes, are distributed to the Clearinghouses quarterly; supplements, listing newly established names and codes, are distributed in each intervening month.

When a corporate source is identified for a document, the name of the institution should be looked up in the current issue of the Source Directory. If it does not appear in the form shown on the document, alternative arrangements of the name should be checked, since the entry on the document may not conform to the COSATI standard. The monthly supplements should also be checked for recent entries. Duplicates, or close variants, should be called to the attention of the ERIC Facility for possible correction. The reference tool Institutional Sources Postings and Statistics may be checked in such cases in order to determine the most heavily used name form, which should then generally be given preference. Cataloging should then proceed in accordance with one of the following paragraphs.

Sources Codes in the ERIC Source Directory

If the corporate source is listed in the Source Directory, enter the code (in Field J) and the institution name (in Field K) on the resume form as follows:

J 1	INST IEE12425	K 1	Carroll County Board of Education, Carrollton, Ga.
2		2	
3		3	
4		4	

Though data in Field K is not keyed in this case, it is necessary to have the name appearing in order for the editors to check the accuracy of the cataloging.

If there are two corporate sources, enter a semicolon after the first code and add the second code to Field J. Similarly, add a semicolon after the first name and add the second name to Field K, in the following example:

J 1	INST_ CIQ11740;	K 1	California Univ., Los Angeles. School of Education;
2	CIQ11101	2	California State Dept. of Education, Sacramento. Bureau of Adult
3		3	Education
4		4	

New Institutions (Not Listed in the current Source Directory

If the institutional name of a corporate source cannot be located in the Source Directory, enter the name only in Field K, making sure that the format of entry conforms to the COSATI Standard. (The COSATI reference publication Corporate Author Codes, March 1970, 850 p. (PB-198275) can be useful in determining new name forms). The blank code field will alert the Facility to the requirement for a new code, and a new entry will be made in the Source File. Entries should be made as follows:

J 1	INST_	K 1	Commission on Engineering Education, Washington, D. C.
2		2	
3		3	
4		4	

If there are two sources, and neither can be located, enter both names in Field K, separating them with a semicolon. If there is sufficient room, it is preferred that the second source begin on a new line, as follows:

J 1	INST_	K 1	Michigan State Univ., East Lansing. Dept. of Near Eastern Studies;
2		2	
3		3	Michigan Vocational Education Research Coordinating Unit, Lansing.
4		4	

If only one source requires a new code, enter the source with the code on the first line, and the second beginning a new line, as below:

J 1	INST_ BBB05773	K 1	ERIC Processing and Reference Facility, Bethesda, Md.;
2		2	
3		3	American Society for Information Science, Washington, D. C.
4		4	Special Interest Group on Foundations of Information Science.

Institution names with existing codes may be entered with comprehensible abbreviations---NOT TRUNCATED---to allow room in Field K for entering new institution names, if required.

IF NO CORPORATE AUTHOR IS IDENTIFIED, LEAVE BOTH FIELDS BLANK!

5.3.10 Sponsoring Agency(ies) Codes (SPON_) (Field L) and Names (Field M)

A Sponsoring Agency is defined as an institution (e.g., Government Agency, private foundation, etc.), other than the corporate author, which supported the work (or the production of the document) by providing funds via contract or grant. Entries in this field must also be made from the ERIC Source Directory or new entries must conform to the COSATI Standard. The instructions in Section 5.3.9 above, for entering corporate authors, apply also to the entry of Sponsoring Agencies.

All reports resulting from contracts or grants funded by NIE or USOE should have one of these organizations (with appropriate subunit, if known) as the sponsoring agency. A typical entry will be:

L1	**SPON_** BBB06621	M1	National Inst. of Education (DHEW), Washington, D. C.
2		2	
3		3	
4		4	

5.3.11 Contract Number(s) (CONT_) (Field N)

The Contract Number is the alpha-numeric identifier assigned by the sponsoring agency to designate the financial support given the work or research reported in the document. If the contract number does not appear on the document, it may be supplied by the cataloger, if the information is available from another reliable source.

Only contracts of the U. S. Office of Education (OE) and the National Institute of Education (NIE) are to be cited in the Contract Number Field. All OE contracts must have the prefix OEC-, as below:

N1	**CONT_** OEC-4-6-0608230-632
2	

All NIE contracts must have as a prefix either NE-C or NIE-C, as below:

N1	**CONT_** NE-C-00-3-0051
2	

N1	**CONT_** NIE-C-74-0015
2	

If more than one contract number appears on the document, add a semicolon after the first, and enter the second, as below:

N1 CONT_ NE-C-00-3-0051;
2 NE-C-00-3-0052

5 .3.12 Grant Number(s) (GR_) (Field O)

The Grant Number is similar to a Contract Number in function and purpose; it is an alpha-numeric tag representing the instrument through which financial support was given the work or research reported in the document. (The distinction is that a grant is usually an outright gift of funds for a given purpose, without detailed subsequent monitoring. A contract, on the other hand, usually carefully specifies certain tasks or contract-deliverable items and the contracting agency monitors the effort and follows up to see that contractual obligations are met).

If the Grant Number does not appear on the document, it may be supplied by the cataloger, if the information is available from another reliable source.

Only grants of the U. S. Office of Education (OE) and the National Institute of Education (NIE) are to be cited in the Grant Number field. All OE grants must have the prefix OEG-, as below:

O1 GR_ OEG-4-6-000516-0969
2

All NIE grants must have as a prefix either NE-G or NIE-G, as below:

O1 GR_ NE-G-00-3-006
2

O1 GR_ NIE-G-74-0025
2

If more than one Grant Number appears on the document, add a semicolon after the first, and add the second, as below:

O 1	GR_	NE-G-00-4-001;
2		NE-G-00-6-007

5.3.13 Project Control Number (BN_) (Field P)

All Office of Education contractor reports entered into the ERIC system should, if at all possible, have a Project Control number, e.g., BR-6-8319. However, if the number does not appear on the document itself, or if it has not been added to the document by the office releasing it, the field should be left blank. The Project Control Number Field is reserved exclusively for Office of Education Project Control numbers, (and for any NIE Project Control Number that may in the future be developed). An example of an entry for this Field follows:

P 1	BN_	BR-5-8047
2		

NOTE: Earlier USOE contractor reports utilized a Project Control Number beginning with the prefix "BR", as in the example. A new USOE-wide Project Control Number is still under discussion. At present NIE does not have a separate Project Control number, but relies on Contract or Grant Number to perform this function.

5.3.14 EDRS Price (PRICE_) (Field Q)

This field is reserved for the entry of the price(s) for which microfiche or hard copy documents can be purchased from the ERIC Document Reproduction Service.

The only valid characters for this field are: numbers; periods (which serve as decimal points); and the semicolon, which follows the microfiche price when a hard copy price is entered.

DO NOT USE DOLLAR SIGNS ($) OR CENT (¢) SIGNS!

Level I Documents

For Level I documents, there are two entries: (1) the microfiche price, which is $0.75 for documents that reside on five (5) microfiche or less, increasing thereafter at a rate of $0.15 for each additional microfiche required; (2) the hard copy price, which is graduated unevenly for the first 100 pages (see table below) and then increases at a rate of $1.20 for each 25 page increment thereafter.

When pagination has been determined, the microfiche and hard copy prices may be determined from the following tables. PAGINATION MUST BE DETERMINED IN ACCORDANCE WITH THE INSTRUCTIONS IN SECTION 5.3.17.

MICROFICHE PRICES

PAGES	REQUISITE MF	PRICE
1-479	1-5	$0.75
480-575	6	$0.90

Add $0.15 for each additional 96 page increment (or fraction thereof).

HARD COPY PRICES

PAGES	PRICE
1- 25	$1.50
26- 50	$1.85
51- 75	$3.15
76-100	$4.20
101-125	$5.40

Add $1.20 for each additional 25 page increment (or fraction thereof).

Entries in the Price field should be made as follows:

a PRICE_ 0.75;10.20

Note the leading zero in the microfiche price. Note that there are NO spaces.

Level II Documents

For Level II documents, there is only a single entry, as follows:

Q **PRICE_** 0.75

When there is only a single entry in this field, the computer system generates the message "HC Not Available from EDRS" for the resume which appears in RIE.

Level III Documents

For Level III documents, only a single zero is entered in this field, as follows:

Q **PRICE_** 0

NOTHING ELSE IS ENTERED! When there is only the zero in this field, the computer system generates the message "Document Not Available from EDRS" for the resume which appears in RIE.

5.3.15 Report Number(s) (REPNO_) (Field R)

The Report Number may be the unique alpha-numeric assigned to the report by the corporate or originating agency, or it may be the unique number assigned to the report by an agency other than the originating agency. Both types of report number may appear on the same document. The cataloging of a report number should follow as closely as possible the way the number appears on the report, for maximum ease of identification. The Dictionary of Report Series Codes (Second Edition), Helen F. Redman, and Lois E. Godfrey, eds., will be helpful in determining the correct form for report numbers. (See Appendix E for the useful and informative introduction to this publication.) This book is available from the Special Libraries Association, 235 Park Avenue South, New York, New York 10003. (1973. 645p. $19.00). If the number is given in two ways on the report, in a short form on the cover and a more explicit form on the title page, use the short form. Examples of entries for various report numbers follow:

R 1	**REPNO**_ OEO-141-61-P-3
2	

R 1	**REPNO**_ AIP-UDC-5
2	

R 1	**REPNO**_ DHEW-OE-73-245
2	

Many Report Numbers appear on the report in an easily indexable form, consisting of letters representing the originating or monitoring agency followed by a unique number. The only editing required for such a number is to insert a hyphen wherever a space appears, in order to assure uniformity in machine sorting. For example:

ASD-TDR-63-24   CCHE-1019   AGDEX-900-014   UCRL-1035

Many Report Numbers consist of a combination of letters and numbers, but the letters do not represent the originating or monitoring agency. Enter such numbers as they are given on the report, inserting a hyphen wherever a space appears but otherwise retaining the punctuation. For example:

R64D61   RR-17   RM-4244

Many Report Numbers include descriptive words within the number; these words may either be ignored or abbreviated (e.g., do not use a format such as "DHEW Publication Number OE-73-245"). The words are ignored when the numbers form one series from the given organization regardless of the descriptive words; they are abbreviated when there are two or more series of documents from the same organization, each associated with a specific group of words. No final punctuation is used in Report Number prefixes. Abbreviations frequently used are:

Addendum	Add	Research Memorandum	RM
Amendment	Amend	Research Paper	RP
Appendix	App	Revised	Rev
Book	Bk	Revision	Rev
Bulletin	Bull	Section	Sect
Chapter	Ch	Series	Ser
Circular	Circ	Special Report	SR
Contribution	Contrib	Summary	Summ
Deletion	Del	Supplement	Suppl
Edition	Ed	Technical Memorandum	TM
Final Report	FR	Technical Note	TN
Memorandum	M	Technical Publication	TP
Number	No	Technical Report	TR
Part	Pt	Technical Translation	TT
Project	P	Translation	Trans
Publication	Pub	Volume	Vol

Examples are as follows:

AFCRL-Trans-175   BSCS-Bull-1   NASA-TT-44

The word "report" may be ignored, and replaced by a hyphen. For example:

OEO Report 5914 becomes OEO-5914.

However, the abbreviation for report, if included with the number and stated on the document, should be entered as follows:

NEA-R-2130

Roman numerals in report number abbreviations should be changed to the Arabic form, for filing purposes. For example:

RDR-65-6-XII becomes RDR-65-6-12.

If a single report number is issued in several parts, this information is added to the report number in abbreviated form, using hyphens, NOT COMMAS OR PARENTHESES, for separation. For example:

ARC-11767-Vol-2.

Some reports are published in a definite numbered series, with a standard phrase always describing the series, but lacking, on occasion, any initials or acronym. In such instances, the phrase may be abbreviated (e.g., Visual Training Laboratory Report No. 65 may become VTL-65) _if_ it can be established that (1) the prefix is used at times by the organization in question, or that (2) the prefix has become commonly associated with the organization. In other words, there must be some precedent in usage either in previous documents of the same organization or in reference works such as that cited at the beginning of this section. _Do not create report number prefixes that have never at any time actually appeared on documents_. Such creations are bibliographic "red herrings", misleading and troublesome to librarians and other users.

If there is more than one report number for a document, the additional report numbers should be entered following the first (or second) report number, but separated by a semicolon. An example follows:

```
R1 REPNO_ SR-24; VRA-412-T-63
 2
```

Report Numbers in sequential series should be entered as follows:

```
R1 REPNO_ S-493; S-494; S-495; S-496
 2
```

DO NOT USE THE FOLLOWING FORMAT:

WRONG!

```
R1 REPNO_ S-493 thru S-496
 2
```

Major information and document processing centers sometimes assign accession numbers that are later so useful in identifying, requesting, and utilizing documents that they are best treated as report numbers and captured at cataloging time. On occasion, through arrangement with the source, these numbers may actually be printed on the document at the time of original issuance. Even when this is not done, most of the copies of such documents in circulation will be those reproduced by the major information centers and therefore bearing the well-known accession numbers. Examples of major accession numbers that should be treated as report numbers are as follows:

Defense Documentation Center (DDC)	AD- (6 digits)
National Technical Information Service (NTIS)	PB- (6 digits)
NASA Scientific & Technical Information Facility	N74- (6 digits)

(The ERIC ED accession number is similarly handled by any of the above organizations happening to process a known ERIC document.)

5.3.16 Publication Type (PUBTYPE_) (Field S)

Publication Type is a single-character alphabetic code which designates the type of document being cataloged. The purpose of this code is to describe the form of the DOCUMENT ITSELF, NOT THE SUBJECT of the document. Select the appropriate character from the following table (Figure 5-6). If there is no exact description in the table of the document in hand, select the closest approximation. Avoid the use of "Other" if at all possible. The entry in Field S should be made as follows:

```
PUBTYPE_R
```

ONLY ONE CHARACTER IS PERMITTED. EVERY RESUME MUST HAVE AN ENTRY.

5.3.17 Descriptive Note (NOTE_) (Field T)

There are two distinct types of information entered in this field:

(1) Pagination, which is determined as described below and is ALWAYS entered;

(2) Other descriptive information which extends the description of the document, and which is entered only when appropriate.

A	Audio Visual/Nonprint Media; Audiovisual Aids; Films; Tape Recordings; Phonotape Recordings; Computer Programs; etc.
B	Books; Monographs, Textbooks; Programmed Texts; etc. (not otherwise classifiable)
C	Curriculum Guides; Teacher-Developed Materials; Laboratory Manuals
D	Directories; Membership Lists; Tables of Organization; Reference Works Dealing with Organizations/Institutions; etc.
G	Guides; Teaching Guides; Resource Guides; Study Guides; Administrative Guides; Leaders Guides; Manuals; Training Manuals
H	Legislation, Legislative Hearings, Legislative Reports, Congressional Documents. (Include both Federal and State levels; include National Commissions).
J	Journal Articles; Serials; Periodicals; Bulletins; Newsletters; Newspapers; etc.
K	Program/Project Descriptions
L	Bibliographies; Annotated Bibliographies; Book Catalogs; Abstracts; Literature Reviews; Literature Searches/Guides; Book Lists; Book Reviews; Library Guides; Indexes (Locators); State-of-the-Art Reviews
M	Maps; Atlases; Gazetteers
N	Numerical and Statistical Tables; Quantitative Data and Analyses
O	Other
P	Proceedings; Conference Records/Minutes (entire)
Q	Questionnaires; Tests; Measurement Devices; Evaluation Devices
R	Reports (Research and Technical)
S	Speeches; Conference Reports; "Papers presented at...", Verbal Presentations
T	Theses; Dissertations
V	Dictionaries; Vocabularies; Glossaries; Thesauri
Y	Annual Reports; Yearbooks

FIGURE 5-6
PUBLICATION/DOCUMENT TYPES AND CODES

Pagination

The pagination information entered in the Descriptive Note field is used by EDRS to determine how many microfiche will be produced for each document. Since the total number of fiche appears on every fiche (e.g., Card 1 of 12, etc.) and the number of pages determines the hard copy price (Level I documents), ACCURACY IN PAGE COUNTING IS ESSENTIAL.

Level I and Level II Documents

Pagination for Level I and Level II documents is NOT simply the number of sheets of paper or sides with printing. It is, instead, THE NUMBER OF MICROFILM IMAGES REQUIRED TO PHOTOGRAPH THE ENTIRE DOCUMENT, which is frequently another number entirely. Therefore, a special procedure must be followed to determine pagination as follows:

(1) All printed pages are counted, including covers, prefaces, title pages, frontispieces, indexes, pocket material, etc.

(2) Blank pages are NOT counted.

(3) If ALL document pages are $8\frac{1}{2}''$ x 11'' or smaller, the total number of such pages is the count for pagination.

(4) If the document pages are larger than $8\frac{1}{2}''$ x 11'':

   (a) Pages up to 20'' in height on which the printed copy exceeds $10\frac{1}{2}''$ in height must be counted as two pages.

   (b) Pages up to 15'' in width on which the printed copy exceeds 8'' in width must be counted as two pages.

   (c) Pages, as above, which exceed the limits of both height and width must be counted as four pages.

(5) Foldouts (pages larger than the basic document pages) should be measured, and the measurement(s) divided by 8'' in the horizontal dimension and 10'' in the vertical dimension (if larger than 11''). The result(s) when rounded to the next highest whole number and multiplied together will give the microfilm frames required to film the sheet. For example, a foldout measuring 25'' x 44'' would divide out to 2.5 and 5.5. Multiply 3 x 6 = 18 frames (pages) for that foldout.

(6) DO NOT INCLUDE counts for "Single Frame Resumes" or end frames.

Level III Documents

Pagination for Level III documents can be determined in accordance with normal cataloging rules, since they are not available from EDRS.

Resume Data Entry Format

Enter the total page count obtained above AS THE FIRST ENTRY in Field T, as in the following examples:

T1 **NOTE** 127p.
2
3

T1 **NOTE** 1,234p.
2
3

Note that ONLY ARABIC NUMERALS are used (with comma where required); and that a lower case "p" and period (p.) ALWAYS FOLLOW THE NUMERALS WITHOUT INTERVENING SPACES.

Other Descriptive Information

If other information, not provided for in other fields, is required to complete the description of the document, it is entered in this field AFTER THE PAGINATION ENTRY, and separated by a semicolon. This information usually identifies: the circumstances under which the document was prepared or presented (e.g., preprint, reprint, speech, conference paper, etc.); the language of the document if other than English; etc. The following examples are meant to be exemplary of common uses of the field, not restrictive.

Papers, Speeches, Reprints, etc.

Descriptive Notes should be constructed as follows:

T1 **NOTE** 19p.; Paper presented at the National Conference for Associate Degree Programs in
2 Nursing (3rd, St. Louis, Mo., March 4-5, 1966)
3

T1 **NOTE** 8p.; Speech given before the National Conference on Higher Education (22nd,
2 Chicago, Illinois, March 7, 1967)
3

T1 **NOTE** 12p.; Reprint from Proceedings of the Annual Convention of the American
2 Psychological Association (75th, Washington, D. C., 1967)
3

If one of these has been published in a journal, a journal citation (See Section 5.3.19) is also appropriate.

Dissertations and Theses

Enter these as follows:

T1 **NOTE** 220p.; Ph.D. Dissertation, University of Connecticut

T1 **NOTE** 77p.; Ed.D. Dissertation, Temple University

T1 **NOTE** 109p.; Master's Thesis, Yale University

Language

If the text of the document is in a foreign language, indicate the language as follows:

T1 **NOTE** 34p.; In French

Copyrighted Pages

If a document has been made available for Level I processing by eliminating a copyrighted portion (See Section 5.3.6), an entry must be made in Field T in one of the following formats:

T1 **NOTE** 254p.; Pages 121 through 143 of the original document are copyrighted and therefore not available. They are not included in the pagination

T1 **NOTE** 95p.; Pages 64, 65, and 68 of the original document are copyrighted and therefore not available. They are not included in the pagination

Related Documents and Analytic "Parents"

If it is desirable for any reason to refer to other documents related to the one in hand, the reference should be entered in the Descriptive Note field.

This applies particularly to documents treated as analytics (that is, when both the entire document and individual sections of it are entered into the system separately). The "parent" document should carry a Descriptive Note referring to the analyzed parents. For analyzed part to "Parent" entries see Section 5.3.18.

NOTE: Analytics and their parts should be contained within one issue of RIE and should not be spread across several issues.

Related document entries are made as shown below:

NOTE_ 37p.; For related documents, see TM 002 488 and 489

The Clearinghouse Accession Number is used in this note because the ED number is not available at the time of processing.

Marginal Legibility

PRIORITY documents (or documents otherwise classed as mandatory input) announced at Level II because of marginal legibility (See Section 5.3.6) must have a Descriptive Note entry in the following format:

NOTE_ 87p.; Not available in hard copy due to marginal legibility of original document

5.3.18 Availability (AVAIL_) (Field U)

This field provides information on the availability of documents from sources OTHER THAN EDRS. While the principal purpose of this information is to provide the user with access to documents not available from EDRS, alternate sources should be cited, when known, even if the document is available from EDRS.

General Rules

Rule 1 - When completed, this field MUST contain all of the following information, when applicable and available:

- o Full Name of the source of the document. Extraneous phrases such as, "Subsidiary of..." should be omitted.

- o Complete Address, including street number or Post Office box number.

- o Catalog, Stock, or Order Number, when appropriate.

- o Price of the document.

Rule 2 - DO NOT use leading phrases, such as "Available from...", or "Hard Copy Available from...". The computer system inserts the phrase "Available from..." in all RIE Availability field entries.

Rule 3 - DO NOT USE THE CENT (¢) SIGN: IT IS NOT IN THE ERIC CHARACTER SET! Translate prices quoted in cents to dollars, e.g., 75¢ should be entered as $0.75. Prices quoted in foreign currencies should not be abbreviated and may use only characters appearing in the ERIC character set, e.g., 2£ 5s. 20d. should be entered as 2 pounds, 5 shillings, 20 pence.

Level I Alternate Availability

Documents announced at Level I should show alternate availability, if known.

Government Printing Office (GPO) documents (which should be announced at Level I, see Section 5.3.6) should ALWAYS show the GPO availability, including order number, if available.

NTIS-available documents processed in original printed form (See Section 5.3.6) should ALWAYS show the NTIS availability, including AD-, PB-, or N- ordering numbers.

Level II Hard Copy Availability

Documents processed at Level II should always cite any non-EDRS availability of hard copy.

Level III Availability

Documents processed at Level III MUST cite a source where the user can obtain the document.

Resume Data Entry Format

Entries in Field U should be in general accordance with the following examples:

For Federal Government agencies, city, state, and ZIP code are generally adequate, as in these examples:

U1 **AVAIL** Superintendent of Documents, U. S. Government Printing Office, Washington, D. C.
2 20402 (HE 5.250:50000-71, $3.75)
3

U1 **AVAIL** Superintendent of Documents, U. S. Government Printing Office, Washington, D . C.
2 20402 (Stock Number 1780-01110, $6.00)
3

U1 **AVAIL** National Technical Information Service, Springfield, Virginia 22151 (AD-741 409,
2 MF $0.95, HC $3.00)
3

However, for commercial, state, and private organizations, a street address or P. O. box number are required, as in these examples:

U1 **AVAIL** University Microfilms, P. O. Box 1764, Ann Arbor, Michigan 48106 (Order No.
2 72-22,363, MF $4.00, Xerography $10.00)
3

U1 **AVAIL** American Institute of Chemical Engineers, 345 East 47 Street, New York, New York
2 10017 ($15.00)
3

U1 **AVAIL** Oregon State University Press, P. O. Box 689, Corvallis, Oregon 97330 ($3.00)
2
3

Discounts

If quantity discounts are offered, they should be shown in the Price area, as in the following examples:

AVAIL Walter Wiesman, P. O. Box 466, Huntsville, Alabama 35804 (1-9 copies, $0.75 ea., 10-99, $0.65 ea., 100-499, $0.60 ea., 500-999, $0.55 ea., 1,000 or more, $0.50 ea.)

AVAIL Walter Wiesman, P. O. Box 466, Huntsville, Alabama 35804 (1-9 copies, $0.75 ea., discounts on larger quantities)

Analytics

If a document is an analyzed part of a "Parent" document (See Section 5.3.6), a reference to the "Parent" document should be entered, as in the following example:

AVAIL Not Available Separately; See TM 002 473

Loan Documents

On occasion, all efforts to obtain a reproduction release or to determine an alternate availability for a copyrighted item will fail. Informing the educational community of such an item can only be justified then if a loan source can be specified. Loan-availability should in general be avoided, but when it can be fully justified, it should appear as in the following example:

AVAIL ERIC/CRESS, Box 3AP, Las Cruces, New Mexico 88003 (on loan)

Supporting Documentation/Audiovisual Materials

Unpublished supporting documentation, not included with the report in hand, or separate audiovisual components associated with the document, should generally only be referred to if some mode of access can be provided the user, and the source cited is willing to assume the administrative burden involved, as in the following examples:

U1 **AVAIL_** Copies of tests used in the evaluation are available from ERIC/CRESS, Box 3AP,
2 Las Cruces, New Mexico 88003
3

U1 **AVAIL_** The Concordance of the Works of Schiller used as a basis for this study is
2 available in computer printout form from MLA/ERIC, 62 Fifth Ave., New York, New York
3 10011 (on loan)

U1 **AVAIL_** The 351 color slides and audio tape described in the abstract are available from
2 the National Audiovisual Center, Washington, D. C. 20409 ($85.00)
3

5.3.19 Journal Citation (JNL_ (Field V)

Journal articles will normally appear in Current Index to Journals in Education (CIJE). However, occasionally a Clearinghouse will wish to input to RIE an older journal article that is relevant, but that was not picked up at the time of original publication and which, because of the age, is no longer eligible for CIJE. Also, Journal articles are occasionally reprinted in technical report format and these may occasionally be submitted to RIE, if they contain additional material or if they have not previously appeared in CIJE.

The format of data in the Journal Citation field should be Journal Title (unabbreviated) in the first subfield, followed by volume number, issue number, inclusive pagination, and date, in that order. Note that the inclusive pagination statement may drop repetitive digits in the figure for the last page. The Journal Title subfield should always be followed by a semicolon. The other data should appear as shown in the examples. Months of the year should be abbreviated to the standard 3-character representations: Jan, Feb. Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec. Other common abbreviations are as follows:

Volume - v
Number - n
Page(s) - p
Spring - Spr
Summer - Sum
Fall - Fall
Winter - Win

JNL_ Journal of Health & Human Behavior; v7 n3 p1221-34 Sep 5 1966

JNL_ Journal of the American Society for Information Science; v23 n5 p292-8 Sep-Oct 1972

JNL_ Kentucky English Bulletin; v16 Fall 1966

5.3.20 Descriptors (DESC_) (Field W)

This field is reserved for the entry of Descriptors, which are defined as indexable (Main) terms appearing in the Thesaurus of ERIC Descriptors. Subject indexing terms not appearing in the Thesaurus (or submitted for entry via DJF but not yet accepted) must be entered as Identifiers (See Section 5.3.21).

Instructions for indexing appear in Section 7 of this Manual.

Instructions for introducing new Descriptors appear in Section 8 of this Manual.

Indexing Depth

The depth of indexing (number of terms assigned) given a document will depend upon the significance of the document, its scope, and, to a lesser extent, the subject area, so it is not possible to either require a fixed number of terms or to set any absolute maximum. However, as a general guide, the average number of terms assigned each document through 1972 was slightly more than eleven (11), and this is a reasonable average. Some documents will require more terms for adequate indexing, and many---if not most---will require fewer. Use of the most specific applicable Descriptors will generally permit staying within limits.

Major Descriptors

Major Descriptors are those which indicate the major subject of the document. Major Descriptors are indicated on the resume form (and in the computer record) by PRECEDING THEM WITH AN ASTERISK (*). This asterisk serves several functions:

- o It identifies the Descriptor as an entry for the subject index of RIE.
- o It identifies the principal subject(s) for users scanning resumes (in RIE or microfiche, or on computer terminals).
- o It permits discrimination in computer searching between major and minor subject indexing.

AT LEAST ONE (1) major descriptor MUST be assigned, and NOT MORE THAN FIVE (5) are permitted for each document.

Resume Data Entry Format

Entries in Field W are made in accordance with the following example:

```
DESC_ Kindergarten; Grade 1; *Visual Perception; *Reading Research; *Predictive Validity;
 Eye Hand Coordination; Reading Comprehension; *Reading; Handwriting; Spelling, *Primary
 Grades
```

Each Descriptor, except the last, is followed by a semicolon and a space. There is no requirement for any particular order, and major Descriptors do not have to precede minors.

SPECIAL NOTE ON CAPITALIZATION AND SPACING: Descriptors are normally entered with the first letter of each word capitalized. Acronym Descriptors are entered in all upper case, e.g., FLES; but see Rh Factors. Articles, prepositions, and conjunctions are not capitalized when used in Descriptor, unless they appear as the first word, e.g., Adjustment (to Environment), Food and Drug Inspectors, Off the Job Training; but see Expenditure Per Student. Spacing of multi-word Descriptors must conform precisely to that in the Thesaurus, e.g., Nonformal Education not Non Formal Education, Programing (Broadcast) not Programing(Broadcast).

5.3.21 Identifiers (IDEN_) (Field X)

This field is provided for additional subject indexing terms which may be required to fully index the document, but which are not appropriate for inclusion in the Thesaurus. Such indexing terms include: Project Names (e.g., Project Head Start); Legislation (e.g., Economic Opportunity Act); Geographic locations and other subject terms which have not achieved broad acceptance. The Identifier field may be used as a "proving ground" to determine usage of a term being considered for the Thesaurus. Rules for the selection and use of Identifiers are detailed in Section 8 of this Manual.

Indexing Depth

The use of Identifiers for indexing documents is OPTIONAL; there is no requirement that an Identifier be assigned to every document. In point of fact, the average number of Identifiers per document is less than one (0.95 as of December 1972). Use one or more Identifiers ONLY WHEN REQUIRED to adequately index the document.

Major Identifiers

There is no minimum requirement for Identifiers, however, NO MORE THAN ONE IDENTIFIER CAN BE ASTERISKED (*) as a major indexing term. As a rule, asterisk the spelled-out version of an acronym, rather than the acronym itself (except in special cases where the acronym has effectively replaced the original in even formal usage, e.g., UNESCO).

Identifier Format

The requirements for the Identifier field present the indexer with something of a dilemma. In the first place, Identifiers cannot exceed 50 character spaces; and in the second, abbreviations are discouraged, since, with decentralized processing, it will seldom be done consistently. On the other hand, some Identifier-type entries will exceed the 50-character limit. While acronyms are used, it is required that this spelled-out version ALSO be entered (when available). Obviously, there will be occasions where some abbreviation or truncation will be necessary. To minimize the possibility of scattering postings among several variations of the same term, the following procedure should be followed.

When it is determined that an Identifier is needed:

(1) Check the list of commonly used Identifiers in Appendix F and use the format shown therein, if the Identifier appears there.

(2) Check the publication ERIC Descriptor and Identifier Usage Report and use the format shown therein. If the same term appears in several formats, use the most heavily posted form.

(3) If the desired Identifier does not appear in either of these lists, AND IF IT REQUIRES ABBREVIATION OR TRUNCATION, call the Facility Lexicographer. If the term has been used before, the Lexicographer will probably have a record of the format used; if not, a format can be agreed upon and a record made for future use.

Resume Data Entry Format

Rules for Identifier Entries:

Rule 1 - Identifier entries cannot exceed 50 character spaces.

Rule 2 - No special characters (except parentheses) can be used.

Rule 3 - If an acronym is entered, the spelled-out version must ALSO be entered (when available).

Rule 4 - NO MORE THAN ONE (1) IDENTIFIER MAY BE ASTERISKED (*) AS A MAJOR TERM.

Rule 5 - Separate Identifiers with semicolons.

Identifiers are entered on the resume form in accordance with the following example:

IDEN Delphi Technique; Macro Cohort Enrollment Forecasting; *Planning Programming
Budgeting System; PPBS

Each Identifier, except the last, is followed by a semicolon and a space. There is no requirement for any particular order. Rules for capitalization and spacing are identical to those for Descriptors (Section 5.3.20).

5.3.22 Abstract (ABST_) (Field Y)

Discussions of the rules and requirements for preparing abstracts are contained in Section 6 of this Manual. The following rules pertain to the entry of the abstract on the resume form.

Rule 1 - DO NOT HYPHENATE AT THE END OF A LINE: see also the discussion in the general rules, Section 5.2.2.

Rule 2 - DO NOT EXCEED THE SPACE LIMITATION OF THE FORM. For Pica (10 characters per inch) typewriters, this is the entire abstract block. For Elite (12 characters per inch) typewriters, do not enter data beyond line 16 (long marks on border).

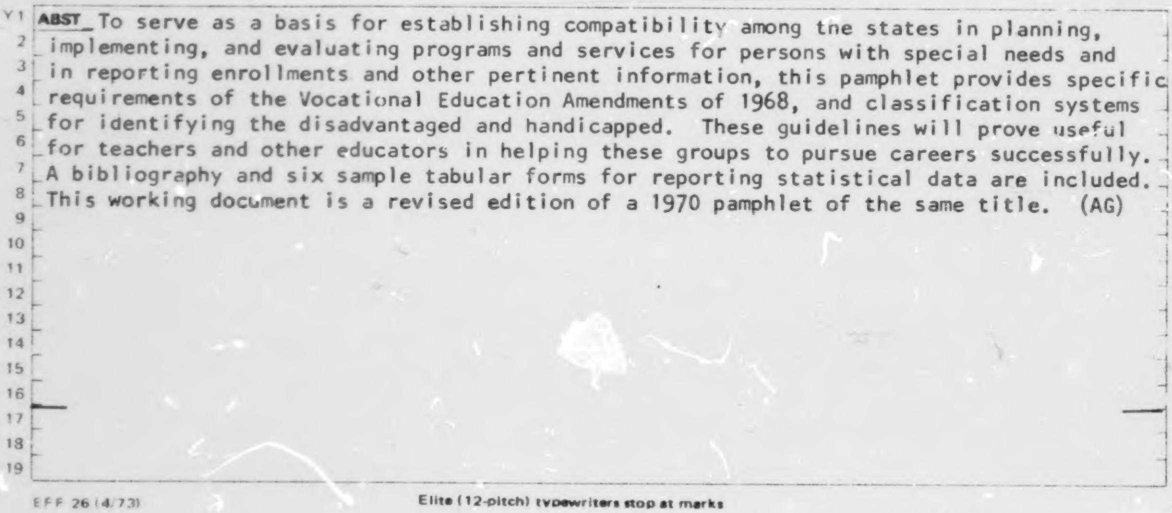
Rule 3 - DO NOT use the underline or super- or sub-scripts.

Rule 4 - DO NOT enter non-abstract data, specifically:

Related document references - See Sections 5.3.17 and 5.3.18.

Marginal legibility - See Section 5.3.17.

The abstract is typed on the form as follows



ABST To serve as a basis for establishing compatibility among the states in planning, implementing, and evaluating programs and services for persons with special needs and in reporting enrollments and other pertinent information, this pamphlet provides specific requirements of the Vocational Education Amendments of 1968, and classification systems for identifying the disadvantaged and handicapped. These guidelines will prove useful for teachers and other educators in helping these groups to pursue careers successfully. A bibliography and six sample tabular forms for reporting statistical data are included. This working document is a revised edition of a 1970 pamphlet of the same title. (AG)

EFF 26 (4/73)

Elite (12-pitch) typewriters stop at marks

The abstractor's initials in parentheses form the last entry in the Abstract. For an author abstract, use (Author). If an author abstract has been edited, use both entries, e.g., (Author/WR).

SECTION OUTLINE

PAGE

- 6.1 ABSTRACTING 197
  - 6.1.1 Definition and Function of an Abstract 197
  - 6.1.2 General Approach to Abstracting 198
    - Decision Concerning Appropriate Type of Abstract 198
    - Content and Emphases of Abstract 199
      - Subject Matter, Scope and Purpose 199
      - Publication Type 199
      - Author's Viewpoint/Bias 200
      - Intended Audience 200
      - Relationship to Other Works 200
      - Intended Use 200
      - Special Features 200
      - Results or Findings 200
    - Audience for the Abstract 200
  - 6.1.3 Guidelines 201
    - Style 201
      - General Rules and Authorities 201
      - Specific Rules 203
        - Length 203
        - Format 203
          - Paragraphs 203
          - Sentences 203
        - Language and Vocabulary 204
        - Voice 204

PAGE

Tense 204
Abbreviations 204
Numbers, Measurement, Time, etc. 205
Abstractor Identification 205

Specific Kinds of Documents 205

Reports (Research and Technical) 205
Speeches/Presentations 206
Curriculum Guides, Teacher Guides 206
Program Descriptors/Administrative Reports 206
Textbook/Instructional Materials 206
Bibliographies/Directories 207
Multiple-Author Works (e.g., Conference Proceedings) 207
Tests/Measurement Materials 207

6.1.4 Sample Abstracts 207

Informative Abstract 207

indicative Abstract 209

ANNOTATING 211

6.2.1 Definition and Function 211

6.2.2 General Approach to Annotating 211

6.2.3 Guidelines 212

Length 212

Format 212

Language and Vocabulary 212

ABSTRACTING/ANNOTATING

Summary of Significant Rules

1. An abstract is written (or extracted) for all documents announced in RIE. An annotation is written for those articles announced in CIJE which do not have expository titles.

2. Abstracts should be of the INFORMATIVE type whenever possible. Certain documents, because of their organization (e.g., conference proceedings, textbooks, etc.), or topic (e.g., compilations of laws, bibliographies, etc.), are not amenable to this approach and require INDICATIVE abstracts. Annotations, because of their restricted length, are usually INDICATIVE.

3. Abstracts should be restricted in length to approximately 200 words. Annotations should be restricted in length to 50 words.

4. The conventional and accepted rules for good writing and good abstracting practice and style should be followed: e.g., (a) Brevity and clarity are essential; (b) Abstracts should have the same relative emphases as the document; (c) Avoid abbreviations; (d) Do not repeat the title; (e) Remain objective and avoid introducing personal prejudices; (f) Evaluative language, comparisons of companies or commercial products, and derogatory comments concerning any person or organization, should not be included unless they are clearly identified as the author's. Always distinguish between author's and abstractor's statements.

6.1 ABSTRACTING

6.1.1 Definition and Function of an Abstract

Dictionaries tend to equate an abstract with a summary, epitome, synopsis, digest, or precis. Collison describes it as a "terse presentation in (as far as possible) the author's own language, of all the points made, in the same order as in the original piece of primary documentary information." It has been said that there is no adequate definition of a good abstract. Be that as it may, it is the intent of this section to communicate that elusive concept.

An abstract provides information to assist the users of an information system who are looking for material relevant to their needs. The ERIC system uses two types of abstracts: the INFORMATIVE, which summarizes the content of a document by condensing its major ideas, and the INDICATIVE, which describes the contents and format of a document. The minimum requirement of every abstract is a statement of the subject and scope of the document.

An abstractor writes an INFORMATIVE abstract as if he were the author presenting an objective summary of his own ideas. By contrast, in an INDICATIVE abstract, the abstractor writes from the viewpoint of an informed but impartial reader and describes the contents and format of a document. An INFORMATIVE abstract contains a statement of the author's thesis, several sentences of his development or proof, and his conclusions. An INDICATIVE abstract reports broadly what is discussed or included in the document, in what manner the information is presented, and if necessary, to whom the document is addressed. In short, the INDICATIVE abstract is a guide to the contents of a document, the INFORMATIVE abstract is a condensed version of the contents of a document.

It is essential that an abstract be basically either INFORMATIVE or INDICATIVE. Switching within one abstract from a direct transmission of the author's ideas to the style of an indicative abstract and the point of view of the abstractor can confuse the user. A reader must never be made unsure as to whether the viewpoint of the abstract is that of the author or that of the abstractor.

Although the two types of abstracts are separate and distinct, the abstractor should realize that in describing a document's contents in an INDICATIVE abstract, he is also conveying some information about the substance. Similarly, an INFORMATIVE abstract may include some description of a document's contents. When it is necessary in an INFORMATIVE abstract, to note the document's tables, figures, extensive references, or appendixes, the abstractor should describe these items at the end of the abstract.

The INFORMATIVE abstract does what the INDICATIVE cannot; it shows the meaningful, coherent relationship between the author's ideas and arguments. As a result, it distinguishes between major and minor information in a document and between this document and others on the same subject. For these reasons, and because it summarizes the contents of a document rather than merely giving a generalized account of them, the INFORMATIVE abstract should be used for all documents except those requiring an INDICATIVE abstract.

6.1.2 General Approach to Abstracting

Decision Concerning Appropriate Type of Abstract

The decision to write one or the other type of abstract depends upon the format or structure of the document and the author's organization of his information. A document with a developed thesis that can be summarized accurately and properly requires an INFORMATIVE abstract. Many of the documents in the ERIC collection are of this kind, (e.g., research reports, speeches/presentations, etc.). However, the contents of some documents may be varied, broad, or for reference purposes. Summarizing them will distort the information and thereby mislead the user. Reviews of research, broad overviews of a subject, curriculum or teacher guides, and administrative and program reports, for example, usually require INDICATIVE abstracts. Bibliographies and documents with multiple authors or subjects (conference proceedings or collections of essays) can be treated accurately only in INDICATIVE abstracts.

To use his reading time to the best advantage, an abstractor first should examine a document to determine which kind of abstract it will require. If he thinks that it requires an INFORMATIVE abstract, he should read all or as much of the document as is necessary to understand its contents. If it is decided that the document requires an INDICATIVE abstract, examining the table of contents, the foreword, introduction, or summary, and scanning the text are usually sufficient. Because the abstractor plans only to describe the document, rather than to summarize its content, he can use his time more effectively by concentrating on the scope and format of a document rather than on its content.

Content and Emphases of Abstract

An abstract should be "weighted" in the same proportions and with the same emphases as the document. This can be accomplished by transmitting accurately, clearly, and completely the essential information in a document. Omitting important ideas, or failing to distinguish between major and minor information, will misrepresent the document to the user who is seeking substantive information. The reader should never be unsure as to the content of a document. Furthermore, he must be able to find information in a document if such information is mentioned in the abstract.

Although by its nature abstracting is a process of selection, the abstractor must remain objective; his obligation is to be faithful to the contents of a document. He should never introduce, implicitly or explicitly, his particular personal or professional prejudices. Evaluations or qualitative language, unless they are the author's, should never be part of an abstract.

A typical abstract might include one or several of the following categories of information.

Subject Matter, Scope, and Purpose of Document

Whenever possible this should be an actual description of the subject matter substance of the work rather than a mere listing of its contents.

Publication/Document Type

Is the work a collection of essays, a literature review, a humorous piece written with tongue-in-cheek, a speech, an in-depth analysis, an expose, an eye-witness account, a commission/committee report? If it is a research report, was the research experimental or of the case study type?

Author's Viewpoint/Bias

What is the author's viewpoint? e.g., Anthropological? Sociological? Psychological? Is one theme or approach emphasized over all others?

Intended Audience

Is the work oriented toward the theoretician or the practitioner? Would it be most useful to the teacher, administrator, or researcher? Is a specific grade level or education level indicated for curriculum material presented?

Relationship to Other Works

Is the work new or does it parallel other work? Do the conclusions reached or methods used contradict other prior work? Is the work claimed as a breakthrough? Was the work directly inspired by prior work?

Intended Use

Does the work contain material intended for specific application, e.g., a curriculum supplement, classroom exercises, etc.?

Special Features

Does the work include a large bibliography, a glossary, a classification scheme, etc.? Do the illustrations include color plates, maps, etc.? Is there an index? Are survey instruments or testing devices included? Is the work part of a related series?

Results or Findings

Any formal conclusions, results, or findings reached by the work should be covered.

Audience for the Abstract

The users of the ERIC system are, in general, professionals (teachers, researchers, and administrators) from many different areas of specialization in the field of education. There is, however, a large audience of potential users (new teachers, graduate students, librarians, personnel at information centers, or people who have only a related interest in the field but still want to be informed) who may not be familiar with the technical jargon of a particular subject matter area. No abstract, then, should be so narrow in outlook or use language so indigenous to one particular field that it cannot be read with understanding by all the users of the system. Yet the abstractor should assume that the readers share a basic core of knowledge (most readers will know much more, of course); therefore, an abstract should not dwell unnecessarily on background information or on commonplace ideas. An abstractor should remember, nevertheless, that he is writing for a user who has not seen the document.

6.1.3 Guidelines

Style

General Rules and Authorities

Brevity and clarity are essential characteristics of a well-written abstract. Brevity is achieved by writing the most compact and concise abstract possible. Too many words may indicate that the abstractor is including details not directly significant instead of concentrating on the principal ideas and facts. Avoid the unnecessary. Information already apparent from the title ordinarily should not be repeated directly or paraphrased.

Clarity in style is achieved by following scrupulously the accepted rules for good writing. Rules about the mechanics of style (punctuation, spelling, capitalization, numerals, etc.) are covered well in the GPO Style Manual. For rules about grammar, the Harbrace College Handbook is a valuable reference. Useful sources of information about style and writing standards are listed below:

(1) American National Standards Institute. Writing Abstracts. 1971. (Z39.14-1971).

(2) Collison, Robert. Abstracts and Abstracting Services. Santa Barbara, Calif., American Bibliographic Center - Clio Press, 1971.

(3) ERIC Clearinghouse on Reading. Author's Guide and Style Manual. Bloomington, Indiana, 1970. (ED-042 935).

(4) Follett, Wilson. Modern American Usage. New York, Hill and Wang, 1966.

(5) Gunning, Robert. The Technique of Clear Writing. New York, McGraw-Hill, 1952.

(6) Hodges, John C. and Whitten, Mary E., Editors. Harbrace College Handbook. 6th edition. New York, Harcourt, Brace & World, 1967.

(7) Jones, Walter Paul. Writing Scientific Papers and Reports. Dubuque, Iowa, W. C. Brown, 1959.

(8) Reisman, S. J., Editor. A Style Manual for Technical Writers and Editors. New York, Macmillan, 1962.

(9) Strunk, William, and White, E. G. The Elements of Style. New York, Macmillan, 1959.

(10) U. S. Government Printing Office. GPO Style Manual. Washington, D. C., 1973.

(11) University of Chicago Press. A Manual of Style. 1969.

(12) Weil, Ben H. "Standards for Writing Abstracts", Journal of the American Society for Information Science, v. 21, no. 5, Sept.-Oct. 1970, p. 351-357.

(13) Weil, Ben H. "Technical Abstracting Fundamentals: II, Writing Principles and Practices," Journal of Chemical Documentation, v. 3, no. 3, 1963, p. 125-132.

Specific Rules

Length

Abstracts ordinarily are limited to approximately 200 words. Within this limitation there is no preferred length for an abstract because the appropriate length is determined by the contents of the document.

Format

Paragraphs

An abstract is always one paragraph long. The accepted rules about paragraph writing must be followed, especially those concerning coherence and unity. A coherent paragraph contains connected sentences, each following the other in logical order. An abstractor can avoid writing a paragraph that is nothing more than a series of sentences, each one summarizing a separate topic in the document, by the intelligent use of transitional words and phrases.

A paragraph should have a topic sentence, some central statement of the document's major thesis, from which the rest of the sentences can develop. (This is especially important in an INFORMATIVE abstract.) Generally, the topic sentence is the first sentence of the abstract, and because it occupies this strategic position, it should be as full and accurate a statement as possible of what was studied or researched and why, by what methodology, and who was the study population.

Sentences

Sentence length should vary as much as possible to avoid the unpleasant effect of a series of short, choppy sentences. Be terse, not telegraphic. Use complete sentences, omitting neither verbs nor conjunctions. Avoid the overlong, complex sentence in which the abstractor piles up clauses and phrases, especially qualifiers and modifiers, in an attempt to include as much as possible in one sentence. Every sentence should have high information density and, without being cryptic, convey a maximum amount of information in a minimum number of words.

Language and Vocabulary

An abstractor should try to incorporate into his abstract the key words in the article, especially if they are repeated often, but he should avoid direct quotations; they usually do not carry enough information to be excerpted. However, single words or short phrases should be quoted if the author has coined a new phrase that is seminal to his whole study and if failure to call attention to it would be misleading. New or technical terms should be defined briefly. Also, polemical or exceptionally suggestive words may be placed within quotation marks. The abstractor should avoid introducing his abstract with either "This report..." or "The purpose of this report (or document) is...". Also, the abstractor should avoid the monotonous repetition of sentences starting with, "It was suggested that...", "It was found that...", or "It was reported that...". Abstracts in which most sentences end with "are discussed" and "are given" are similarly ineffective.

Voice

Use the active voice whenever possible in an INFORMATIVE abstract because it allows for direct expression when summarizing the actual contents of a document. Use the passive voice in an INDICATIVE abstract to describe and to highlight the process of writing the document. For example, such words as "are included", "are discussed", "is presented", and "are reviewed" should appear only in an INDICATIVE abstract.

Tense

The tense of the document can suggest the tense of the abstract. The present tense is proper for an INDICATIVE abstract (e.g., "are listed" instead of "were listed").

Abbreviations

Abbreviations should be kept to a minimum. If a long term with a recognized abbreviation or acronym is used more than once, it should be spelled out the first time it appears in the abstract and abbreviated thereafter. At the time of initial use, the abbreviation should be placed in parentheses following the term (e.g., Mobilization for Youth (MFY)). This is not necessary, however, if both spelled-out version and acronym appear in the title, in which case the acronym may be used by itself throughout the abstract. If it is necessary, because of space limitations, to abbreviate, it is permissible to use the common "shorthand" of the field involved, e.g., SES, for Socioeconomic Status. Note: Letters in acronyms are not separated by periods.

Numbers, Measurement, Time, etc.

Follow the rules in the GPO Style Manual, section 12, "Numerals".

Abstractor Identification

The abstractor should sign his initials in parentheses at the end of the abstract, e.g., (AS). If an author abstract is used unchanged, use (Author) to identify the source. If the abstractor substantially revises an author abstract, both should be identified, e.g., (Author/AS). Abstracts obtained from the National Technical Information Service should be identified as follows: (NTIS) or (NTIS/AS).

Specific Kinds of Documents

The point has already been made that different types of documents require different types of abstracts (i.e., INFORMATIVE or INDICATIVE). Even when dealing with the same type of abstract, however, it may be necessary to vary the approach in order to accommodate different kinds of documents. The following guidelines provide specific advice for some of the more common types of documents.

Reports (Research and Technical)

These usually require INFORMATIVE abstracts, which should contain: (1) objectives and hypotheses of the research, (2) methodology, (3) findings and conclusions, and (4) specific implications or recommendations for further research. Methodology should be summarized accurately and include subjects, variables, controls, conditions and testing. If limitations to the study are mentioned, they should be included. Background information should be used only if necessary to explain the objectives.

Speeches/Presentations

These reports usually require INFORMATIVE abstracts, which should contain: (1) background information only if necessary, (2) statement of premise or thesis, (3) development of ideas or argument, with proofs and major supporting facts, and (4) conclusions.

Curriculum Guides, Teacher Guides

These usually require INDICATIVE abstracts, which should contain: (1) subject area and grade level of the curricular material, (2) specific objectives of the course, (3) unit areas of the course, (4) particularly interesting methods used, and (5) supplementary activities and materials suggested.

Program Descriptions/Administrative Reports

These usually require INDICATIVE abstracts, which should contain: (1) objectives of the program and identification of the target population, (2) types of special teachers and other personnel and numbers of classes or students involved, (3) means or suggested means of carrying out the program, including any sort of community participation or publicity efforts, (4) special methods used to overcome problems, and (5) to-date progress of the program with expected changes in future plans, or, if the program has been completed, conclusions or evaluations of the program's effectiveness.

Textbook/Instructional Materials

These usually require INDICATIVE abstracts, which should contain: (1) objectives of the text, including target student population, (2) description of the general nature of the subject matter, and (3) special methods used in meeting objectives, including notation of illustrations and accompanying activities. Recounting specific textual material is not necessary, unless doing so will explain methods used in achieving objectives. Tests or measurement/evaluation instruments, accompanying a report as supporting documentation, may be analyzed out as a separate accession (See 5.3.18 "Analytics"). The TM Clearinghouse may be consulted if there are questions relating to such material.

Bibliographies/Directories

These usually require INDICATIVE abstracts, which should contain: (1) subjects included, (2) reference to annotations, if any, (3) dates of materials (earliest to latest), (4) types of materials listed, and (5) potential users or target audience.

Multiple-Author Works (e.g., Conference Proceedings)

Depending on the number of papers included and space limitations, these usually require INDICATIVE abstracts, which should contain: (1) statement of the subject and scope of the collection, and (2) narrative-type table of contents. If there are too many articles to list, discern broad subject areas and group the articles.

If a document contains a large number of important papers, the Clearinghouse personnel may decide to assign separate accession numbers to items they wish to be handled separately, and write INFORMATIVE abstracts. The resume for the overall document should indicate the processing level of the entire document. Each resume for papers or sections separately analyzed should be entered at Level III, with a reference to the accession number of the parent item. (See 5.3.18 "Analytics").

Tests/Measurement Materials

These usually require INDICATIVE abstracts, which should contain: (1) purpose and objectives of the test, (2) forms and levels of the test, including whether verbal or non-verbal, (3) identification of the group to be tested, including grades, ages, etc., (4) description of the testing, scoring, and grading methods to be observed, including time limits, whether individually or group administered, qualifications needed to administer, special equipment needed, etc., (5) normative data and information concerning reliability and validity.

6.1.4 Sample Abstracts

Informative Abstracts

The following abstract is of a program report. It was written as an information abstract in order to give the reader the maximum amount of information about the program. This is a readable, useful statement about the essence of the report.

> The 1972 Summer Youth Employment Program, sponsored by the Davis-Monthan Air Force Base in Arizona, included 596 youngsters, of whom 377 belonged to the Neighborhood Youth Corps, 130 more were economically disadvantaged, and 48 were American Indian students employed by the base. A wide range of government, industrial, and educational institutions supported this vocational development program by providing funds, practicum counselors and vocational counselors, school buses, and other services. The work experience proved highly successful, due to the encouragement of the work-coordinators and counselors and the use of such techniques as resource speakers, peer tutoring, a refresher course in typing, and drug education instruction. Special-education students were included in this program, which was evaluated by means of questionnaires for supervisors. Various program forms are appended.

The following abstract of a paper is faithful to the author's point of view. To write "the author says" at the beginning of the abstract would add nothing to it (except to make a reader think that any abstract without those words in it was not quite faithful to the author) and to insert those three words in the middle of the abstract would surely confuse a reader.

> Negative preconceptions about the disadvantaged often hinder the effectiveness of teachers and administrators in schools in culturally depressed areas. Most disadvantaged children are not special discipline problems, nor are they hostile or unresponsive. They and their parents have high, even unrealistic, educational aspirations. Teachers should encourage in the children the self-discipline which leads to academic success, which, in turn, would break the self-fulfilling prophecies of failure.

The following abstract is an example of a coherent, unified paragraph which shows clearly the order of the argument. Transitional words help the reader to follow the line of development.

> The teacher and the school system serve as the key mediators in the acculturation of students from deviant subcultures. However, the teacher's commitment to the ethic of work and competition, her future-oriented value system, and her concept of a father-dominated nuclear family structure tend to alienate her from her students. As a result, many Indian and East Harlem children, whose culture is different from hers, may never acquire the tools for full acculturation. Alienation between student and teacher is further reinforced by the child's concept of the teacher as a success in a hostile culture and by the teacher's materialistic motivation for choosing her profession. Moreoever, the educator's opportunity for personal, individual evaluation of students is often limited by administrative prescriptions. Several important steps in teacher education can assure a more successful cultural bridge between student and school personnel. The staff should understand and accept the presence of alien subcultures in their school and initiate measures for parent cooperation and student participation in programs for developing skills and raising the aspiration level. Teachers should also exhibit flexibility in recognizing and rewarding evidences of nonverbal achievement.

Indicative Abstracts

The following abstract of a bibliography gives the reader all the information he needs about the contents of the document. Such words as "emphasis on" and "the major portion" suggest the document's proportions and therefore its potential usefulness.

> Eight hundred and nine books and articles published between 1885 and 1967 are listed in this bibliography for students of applied German linguistics at the graduate and undergraduate levels and teachers of German in high schools and colleges. Though emphasis is on applied linguistics, some publications on linguistic theory are included. The major portion of the bibliography is devoted to works on morphology and syntax, and there are sections on general language and linguistics, phonetics and phonemics, prosodic features and juncture, linguistics and the teaching

> of foreign languages, and language changes in German since 1945, especially in the increased use of English words. The entries are cross-referenced and a few are annotated for clarification of content. An author index and a list of the abbreviations used for entries from scholarly journals are also provided.

The following abstract of an institute report shows one possible way to write an INDICATIVE abstract and include information and emphases. Although there are enumerations and lists, every sentence does not begin or end with "is included", and there is no monotony of sentence structure.

> The narrative portion of this report describes the specially-designed 1966 NDEA summer institute for state foreign language supervisors held at Indiana University. It summarizes activities undertaken in the six principal areas of the curriculum: (1) statistics, (2) experimental design and research, (3) linguistics, (4) supervision, and curriculum development, (5) psychology and professional resources, and (6) instruction in French, German, or Spanish. The report also presents the results of the evaluation made by participants at the conclusion of the institute. The information contained in the appendixes, amounting to more than one-half of the report, includes the forms used in conducting the institute, a directory of participants and staff, the schedule of special events, the institute calendar, lecture outlines, student and faculty evaluation questionnaires, bibliographies, and a list of the materials available to participants in the curriculum library.

The following abstract is of an article that contained tables and interpretation of that data. It is a readable abstract, which not only emphasizes the main idea but also gives information.

> A Modern Language Association (MLA) statistical survey shows the number of students studying French, Spanish, German, or Latin in the secondary schools during each school year from 1958-59 to 1964-65, the percentage studying each language in relation to the total high school population, and the percentages studying Latin in relation to the total foreign language enrollment. The data reveal a continuous decline in the study of Latin in the high schools, as compared with the study

of the other three languages, and points to, among other things, a lack of understanding among students, educators, and parents of the cultural values of classical studies for the English-speaking student. What is strongly urged is the kind of nationwide "public relations" program that the MLA launched in 1952 on behalf of modern foreign language study.

6.2 ANNOTATING

6.2.1 Definition and Function

An annotation is a succinct explanation or description of a particular work. Although closely related to an abstract, an annotation is considerably briefer and therefore usually characterizes rather than summarizes.

In the ERIC system, annotations of no more than 50 words are prepared for selected journal articles (EJ Accession series) announced in Current Index to Journals in Education (CIJE). The purpose of an annotation is to explain and indicate important facets of content not evident from the Title, Descriptors or Identifiers and to thereby facilitate the user's search through the periodical literature.

6.2.2 General Approach to Annotating

Annotations should be included in CIJE on a selective basis. Annotations are not always necessary to identify the subject matter of an article. If the scope and value of an article are adequately expressed by the bibliographic citation and accompanying Descriptors or Identifiers, do not include an annotation. If, however, the normal entry fails to convey subject content or an important feature or aspect of the substance of an article, an annotation should be added. The true meaning and utility of an article may be lost because of a clever title (e.g., "Climb the Ladder" or "Send No Box Tops") or a highly technical title (e.g., "The Saint-Cloud Method: What it Can and Cannot Achieve" or "Tandhoff's Disease in a Scottish Family"). When this situation occurs, an annotation should be added.

Either INFORMATIVE or INDICATIVE annotations are permissible. However, the brevity of the annotation form presupposes that most annotations will be of the INDICATIVE type. An INDICATIVE annotation is written from the point of view of an informed reader and describes the content, format, or use of an article. In contrast, an INFORMATIVE annotation presents an objective summary of the author's own ideas, or one or more of the conclusions presented. Because of its size limitations, an annotation of this type will generally not present in condensed form a summary of an article itself. In other words, though the same general approach (described in Section 6.1.2) for developing a concise representation of a document holds for annotating as well as abstracting, an annotation, unlike an abstract, does not have to be "weighted" in the same proportions and with the same emphasis as the original article. Lengthy informative annotations should not be used.

As with an abstract, an annotation should avoid evaluative language (particularly negative evaluations) introducing personal or professional prejudices. However, useful statements such as, "written for the nonspecialists", "designed to be helpful to the practicing English teacher", or "attempts a clear explanation of a complex topic" can be used.

6.2.3 Guidelines

Unless otherwise stated here, the guidelines that appear in Sections 6.1.2 and 6.1.3, pertaining to abstracts, also apply to annotations.

Length

Annotations should not exceed 50 words. Most annotations will generally be between 30 and 50 words in length, however, there is no fixed lower limit. Author or editor-provided annotations to articles may be used and re-written to conform to the 50-word limitation, if necessary.

Format

Annotations should be only one paragraph long. Whole sentences are preferable but more telegraphic sentences (than would be used in abstracts) are acceptable. Single descriptive words, simple phrases, or lists, may also be used. Since annotations are not necessarily written in full sentences, some of the mechanics of style described in the GPO Style Manual and the other authorities do not pertain.

Language and Vocabulary

Since an annotation is basically an attempt to improve on an uninformative title, the annotation should avoid repeating specific terms contained in the Title or Descriptors. In other words, use the annotation to bring in fresh information rather than to repeat information already available in the entry. This is not a strict prohibition as circumstances will sometimes necessitate that a term be repeated. If special or unusual words appear in the title, the annotation can be used to explain them. Unlike an abstract, an annotation may be composed of a quotation excerpted from the article (and punctuated as such).

POSTSCRIPT

The following quotations were assembled by Robert Collison and appear at various places in his book Abstracts and Abstracting Services. They are repeated here, with attribution, for the insight they can provide into the art of abstracting.

Since no one has ever defined a good abstract, the future of abstracting, professional or amateur, seems assured.

L. VANBY

Abstracts were, of course, strongly opposed by those who felt that if God had intended them to publish abstracts they would not have published full papers in the first place.

DEREK DE SOLLA PRICE

Abstracts provide the capability to concentrate within a single publication knowledge that is recorded in a multitude of research papers and technical reports.

IRVING M. KLEMPNER

The abstract was described as a method devised several centuries ago to cope with excessive publication. It is no longer able to cope . . . .

MARY L. TOMPKINS

The intent of an abstract is to present the skeletal structure of the original and report the crucial findings or new processes the author presents.

SOCIOLOGICAL ABSTRACTS: User's guide

The quality of abstracts depends largely on the ability of the abstractor to understand the significance of the paper being covered.

E.J. CRANE

Abstracts rarely give the exact information the reader wants to know.

MARIAN P. ANDERSON

The automatic abstracts derivable by present techniques require human editing to achieve adequate communicability.

SYSTEM DEVELOPMENT CORPORATION

The production of an abstract journal seems to be a continuing fight against error.

CHARLES L. BERNIER

SECTION OUTLINE

PAGE

7.1 INTRODUCTION 221
- 7.1.1 General 221
- 7.1.2 Subject Access 221
- 7.1.3 Coordinate Indexing 221
  - General 221
  - Searching a File That Has Been Coordinate Indexed 222
  - Terminology in Coordinate Indexing 223

7.2 INDEXING FOR ERIC - PURPOSE AND APPROACH 225
- 7.2.1 General 225
- 7.2.2 ERIC's Modified Coordinate Approach 225
- 7.2.3 Nature of the Educational Literature 226
- 7.2.4 Educational Community User Groups 226

7.3 INDEXING TOOLS 227
- 7.3.1 Thesaurus of ERIC Descriptors 228
- 7.3.2 Research in Education/ Current Index to Journals in Education 229
- 7.3.3 Descriptor and Identifier Usage Report 230
- 7.3.4 ERIC Clearinghouse Scope of Interest Manual 230
- 7.3.5 Other Reference Sources 231

PAGE

7.4 INDEXING PROCESS 231

7.4.1 General 231

7.4.2 Examination of the Document 233

7.4.3 Identification of Indexable Information 234

1. Population Concepts 236

Grade/Academic Level 236

Other Groupings 236

Age 236
Occupation 236
Race/Nationality 238
Religion 238
Intelligence or Ability Level 238
Physical or Emotional Characteristics 238
Socioeconomic Characteristics 238

2. Action Concepts and Material Concepts 239

3. Curriculum Concepts 239

4. Document Form/Type 240

5. Identifiers 241

7.4.4 Translations and Negotiation (Indexable Concepts into Approved Terminology 243

Use of Exact Equivalent, Synonym, Broader Term, or Two Terms Coordinated 243

Use of a New Descriptor/identifier 247

7.4.5 Special Issues 248

Indexing Specificity 248

Major/Minor Index Terms 251

7.4.6 Indexing Review 254

7.4.7 Recording Indexing on Resume Form 255

FIGURES

PAGE

7-1 Grade/Academic Level Descriptors 237

INDEXING

Summary of Significant Rules

1. Descriptors used in the indexing process must either be in the Thesaurus of ERIC Descriptors, or have been proposed for inclusion in it (See Section 8.5).

2. The Identifier Field should be used to index specific entities, such as geographic locations, project names, etc. Identifiers must be structured in conformance with the rules contained in Section 8.4.

3. The "major" subject matters of the document, whether expressed as Descriptors or Identifiers, must be asterisked (*) in order to distinguish them from the less substantial or "minor" topics. The following kinds of terms should be avoided as major, where possible:

   (a) Excessively broad terms, which lack discrimination (e.g., DEVELOPMENT), and which might otherwise collect large numbers of postings in a single journal issue;

   (b) Excessively narrow or specialized terms (e.g., HETEROGENEOUS GROUPINGS) which are not likely to occur to the users of manual indexes.

4. At least one (1) major Descriptor must be assigned to a document; not more than five (5) major Descriptors are permitted for each document. There is, however, no upper limit on the total number of Descriptors that can be used to index a given document; the average through 1973 for RIE is around eleven (11).

5. There is no minimum requirement for Identifiers; no more than one (1) Identifier should be designated as major.

6. Index to the specific level of subject matter covered by the document. Do not automatically index "up" to higher generic levels than the document actually deals with. Do not automatically index "down" to all the sub-elements of the level dealt with.

7. Index in depth, or exhaustively, all significant concepts covered in the document.

8. Index the document and exposition in hand; avoid indexing implications, possible uses, and other aspects referred to, but not actually dealt with.

9. Index on the basis of the entire document, not just a part such as the Introduction or Conclusions.

10. Every effort should be made by the indexer to index by the grade/academic level, and other population concepts, with which the document is concerned.

11. Insofar as possible, index terms used should appear (in recognizable form) in the abstract (or title) of the document. This provides the user with a reassuring justification for the use of the index term for that particular item.

7.1 INTRODUCTION

7.1.1 General

Any collection of books, reports, or of any recorded information is of value only when the items in the collection are accessible and can be retrieved. Access points may be virtually any of the fields of data recorded for the items, e.g., personal author, title, report number, contract number, corporate source, publisher, accession number, subject, etc. The development of the various non-subject data fields is usually called "Descriptive Cataloging"; the development of the subject-oriented data fields is usually called "Subject Indexing". This Section is concerned with the latter, establishing access to documents by their subject matter.

7.1.2 Subject Access

An indexer establishes subject access to the items in a collection. This can be done in various ways: (1) Assignment of conventional library "Subject Headings", as can be found on Library of Congress printed catalog cards; (2) Assignment of the item to a position (identified by number) in a classification scheme, such as the Dewey Decimal Classification; (3) Identification of key words (as opposed to trivial words) in the title (and perhaps abstract) of the document; (4) Assignment of index terms other than the conventional library type, e.g., these are called variously "tags", "descriptors", "unit terms", etc.

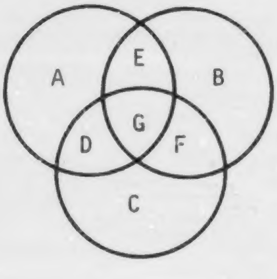
In ERIC, the indexing system is of this fourth type. The principal index terms are called Descriptors and the techniques followed are generally those that have been developed over the years under the rubric "Coordinate Indexing". It is not the task of this Section to discuss all types of indexing. It is necessary, however, to spend some time on the nature of, and rationale behind, Coordinate Indexing.

7.1.3 Coordinate Indexing

General - Coordinate Indexing arose from the need to perform indexing in depth. The report literature that began to burgeon in the 1940's could not be adequately characterized, in terms useful for working scientists and technicians, via two or three library subject headings affixed to 3 x 5 catalog cards. Those working with the report literature desired rather to attach a term or tag to every significant concept in the report. This often involved 10-20 concepts. The possible combinations in subject heading form would have been prohibitive. The solution arrived at was to largely eliminate the relationships between concepts and rely on unit concepts. The relationships are then picked up or re-constructed by combining several terms in the search procedure. The assignment of index terms which are meant to be put together or coordinated at the time a search is conducted is called "Coordinate Indexing" because the searcher must coordinate the index terms to arrive at the desired result.

Searching a File That Has Been Coordinate Indexed - The entire justification for the indexing process lies in the retrieval/searching process. It is important, therefore, for the indexer to understand how searches are conducted. It is a standard admonition to indexers for them to put themselves in the shoes of the searcher.

The strategy used in searching in a coordinate indexing system is generally based on set theory and Boolean logic. Drawn below is a Venn diagram consisting of three overlapping circles, which we call A, B, and C. The areas of overlap of two circles we call D, E, and F, and the overlap of all three we call G.



Let us suppose that Circle A represents the reports in our collection indexed by the descriptor TEACHING METHODS, Circle B those indexed by SCIENCE and Circle C represents those indexed by DISADVANTAGED. The areas of overlap D, E, and F, then represent those documents indexed by two of the Descriptors, and Area G represents those indexed by all three Descriptors. In phrasing a search question concerning material on methods of teaching science to the disadvantaged, the searcher might say he wants those documents indexed by both the terms TEACHING METHODS and DISADVANTAGED, which are those documents in Areas D and G. Or the searcher might ask for documents indexed by TEACHING METHODS and either DISADVANTAGED or SCIENCE. This would be those documents in Areas D, E, and G. If the searcher decided to look at documents indexed by TEACHING METHODS and SCIENCE, but not in the area of the DISADVANTAGED, this would be those in both A and B but not in C, resulting in Area E only, excluding area G. A search for items indexed by all three of the terms TEACHING MATERIALS, DISADVANTAGED, and SCIENCE would restrict itself to Area G. All combinations are based on the Boolean logical operators AND, OR, NOT. "AND" indicates those things common to two or more groups, "OR" those things in two or more groups, whether or not in common, and "NOT" those things not in a particular group or groups.

As can be seen, searching in this way quickly gets complicated and requires special assisting devices such as "double-dictionaries", Uniterm cards, or computers to help make the coordinations. Manual searching can conveniently coordinate only two terms.

Terminology in Coordinate Indexing - In discussing Coordinate Indexing it is important to have available the standard terminology that has developed.

Pre-Coordinated Term - A concept that is prevalent enough in a given system to warrant representation by a single unique term rather than by terms representing its several components. For example, the ERIC system contains both the single terms TEACHERS and ATTITUDES. The concept

"Teacher Attitudes" could be represented by the assignment of these two separate terms. However, this concept appears frequently enough and is searched frequently enough to warrant pre-coordinating the terms (that is, at indexing time, prior to searching) into the single useful index access point TEACHER ATTITUDES. The ERIC system pre-coordinates terms both on the basis of utility, as indicated above, and in order to have maximally useful terms appearing in its printed indexes, which are manually searched. (Please note that a complex concept, represented by a multi-word pre-coordinated term, can still itself be post-coordinated at search time to form an even more complex concept.)

Post-Coordination - This refers to the action, after (or post) the indexing process, of coordinating two or more terms to make up the desired concept. For example, rather than develop the distinct concept "Italian Speakers" or "Italian Speaking" into a single pre-coordinated term, it might be decided to rely on post-coordination of the two separate terms ITALIAN and NATIVE SPEAKERS.

Posting - To record. A document accession number can be "posted" to a list of similar numbers that have all been indexed by the same term. An index term can in turn be "posted" along with other such terms, to a document record. The first usage is the most common; the accession numbers are sometimes referred to as "postings".

False Drops - In a coordinate indexing system terms are often assigned to a document that can go together, but are not meant to. A retrieval based on such an unintended coordination is called a "false drop". For example, a document could be indexed by the terms ACTIVISM, STUDENTS, and TEACHERS. The document dealt with "student activism", but a search aimed at "teacher activism" might retrieve it as a "false drop".

Roles and Links - These devices to improve retrieval results are not used in the ERIC system. "Roles" refer to additional information attached to index terms to designate the functional sense in which they are used. For example, an extra tag could be added to terms to identify those that refer to elements of the curriculum (as distinct, say, from areas of research). "Links" refer to methods of indicating which Descriptors assigned to a document may legitimately be coordinated. Descriptors from the same area of the document are given some similar additional tag. The process is very like the standard library practice of "analyzing out" selected distinct sections of a larger work, treating them as if they were documents in themselves.

7.2 INDEXING FOR ERIC - PURPOSE AND APPROACH

7.2.1 General

The purpose of indexing for ERIC is to provide subject access to the documents announced in RIE and the articles announced in CIJE. The indexer or abstractor/indexer examines the document, chooses the concepts to be indexed, and translates these concepts into the indexing terminology of the system. In the ERIC system a modified coordinate indexing approach is used and the controlled vocabulary or authority list containing the index terms that may be used is the Thesaurus of ERIC Descriptors. The Thesaurus lists all terms that can be used by the indexer, together with a display of terms, Broader, Narrower, or Related to the given term. Cross-References are made from Synonyms, or other terms not to be used, to authorized index terms.

A detailed description of the role and function of the Thesaurus, and a bibliography of closely related lexicographic materials, are both included in the published edition of the Thesaurus.

7.2.2 ERIC's Modified Coordinate Approach

An indexer in the ERIC system must have two distinct objectives: (1) In-depth extraction of all significant concepts in the document so that the machine-readable data base will be manipulatable by these tags and searchers using machines can therefore access them; (2) Selective identification of the major concepts in the document for use in preparing printed indexes to the announcement journal and for subsequent manual searching (as well as machine searching).

The in-depth indexing may safely use any term in the authority list. The selective indexing for the benefit of the printed index, however, must keep in mind that manual searching is limited in its ability to coordinate several terms. Therefore, the terms selected to represent the major concepts of the document should in general be at a level of specificity useful to the user. For example, use of the specific single term COUNSELOR TRAINING would be preferable to use of the two broad terms COUNSELORS and TRAINING, and would save the manual user considerable work. The selective indexing is also limited in the number of terms that it can assign due to physical and economic limits on the size of the printed indexes, thereby also arguing for care in finding the specific, perhaps precoordinated, term rather than several less well targeted terms.

7.2.3 Nature of the Educational Literature

Virtually anything can be taught. The field of education, therefore, comprises many subjects and is often dependent on or derived from work that is basically in other disciplines. The literature of education takes many forms. ERIC deals with all significant educational documents regardless of format, e.g., research reports, journal articles, speeches, papers presented at meetings, state-of-the-art surveys, statistical compilations, teacher guides, reviews, government hearings and legislation, curriculum materials, bibliographies, newsletters, etc. The methods of inquiry used in these variations vary from the rigidly empirical to the philosophically discursive. What controls selection (See Section 3) is overall quality and the judgment as to whether the item would be of interest and value to others.

The literature collected, announced, and indexed by ERIC exhibits perhaps more variability than that of any other information system. A laboratory study on the nature of long-term memory, or a disquisition on the educational philosophy of John Dewey, may be announced on the same page as a guide to kindergarten teachers on using finger paints. The literature of education is multifaceted in nearly every sense: the topics, the approaches and methods, the formats, and the users for whom the literature is intended.

7.2.4 Educational Community User Groups

The users of any information system may be divided into two main groups: (1) the researchers, scholars, teachers, laymen, etc., in the field and external to the system; (2) the information specialists, librarians, document processors, etc., employed by components of the system and internal to it.

The inside users have various requirements to tap the ERIC file. They answer telephonic and correspondence reference inquiries, they search and prepare bibliographies for clients, they prepare information analysis products (IAP's), and other publications. Working in basically the same environment as the indexers, it is relatively easy for the internal users of the system to provide feedback to the indexers (at their own Clearinghouse and at others also) as to access points that are needed and that the indexer should provide whenever relevant. It is common within the ERIC system for each Clearinghouse to have its own list of "most frequently used index terms" (See Appendix C) which the indexer makes use of specifically to meet internal information needs.

The heterogeneous external group of users covers the entire spectrum from ultra-sophisticated and scholarly basic research activities to the applied sector occupied by administrators, teachers, legislators, etc. Indexers must keep in mind these various groups and not slant their indexing solely toward one class or level of user. ERIC indexing must satisfy the needs of both generalists and specialists, both the untrained lay public and the trained member of the educational community. The indexer must strive to strike a balance between over-indexing, which can create "red-herrings" for searchers, and "under-indexing", which can effectively hide a document from potential users. Feedback from external users to indexer is often difficult to obtain, but can be extremely valuable as an indicator both of access points needed by the field and new index terms that should be added to the Thesaurus.

7.3 INDEXING TOOLS

There are several publications which are either necessary or very helpful for the indexer to consult during the indexing process:

7.3.1 Thesaurus of ERIC Descriptors

All Descriptors used by an indexer must either be in or have been proposed for inclusion in, the ERIC Thesaurus. The Thesaurus is the major reference used by the indexer in translating the concepts found in the document into terminology acceptable by the system. The Thesaurus is the authority list mechanism which provides control over the indexing vocabulary and helps to ensure consistent use of terms throughout the system. The Thesaurus lists all terms which have been formally accepted by the system. Terms which are ambiguous or unusual are provided with definitions/scope notes. Cross-references are made from Synonyms, or terms not to be used, to the approved word forms. Each main term carries with it class memberships (generic relationships) in the form of terms thought to be "Broader" and terms thought to be "Narrower" than the given term. Other types of relationships are noted via the display of "Related" terms. The Thesaurus serves both the indexer and the searcher. It brings to the attention of the indexer those terms which might be employed in making a search for the document and it brings to the attention of the searcher those terms which might have been employed by the indexer in describing documents pertinent to the searcher's question. The structured nature of the vocabulary is intended to guide both sets of users toward similar conclusions and actions. A thorough knowledge of and familiarity with the Thesaurus is required of all indexers.

The Thesaurus is available in four formats (four "cuts" of the same basic data) each providing the indexer with a different way of entering the Thesaurus and moving through it to find the exact terms to use in indexing. The Alphabetic Display presents all terms, including Synonyms, alphabetically, together with definitions and complete cross-reference structure. The Rotated Display provides a permuted alphabetical index to all significant words that form Descriptors in the Thesaurus (Synonyms are not included). In other words, PASS FAIL GRADING appears under PASS, under FAIL, and under GRADING. This display is useful in determining all usages of a particular word in the Thesaurus, without respect to its position in a phrase or multiword Descriptor. It tends to group related terms whereas they may often be separated in the main alphabetic array, thus aiding indexers in performing a more complete search of the Thesaurus, search analysts in translating their inquiry into the language of the system, and subject analysts in structuring new Descriptors. The Hierarchical Display presents an array of generic tree structures arrayed by all the "Broadest Terms" in the Thesaurus, i.e., all the terms that carry "Narrower Term" cross-references under them, but no "Broader Term" cross-references above them. (Terms having no BT-NT structure at all are also considered "Broadest Terms"). Under each "Broadest Term" the particular generic tree involved is carried to its farthest extreme. Generic subordination (or class membership) is indicated via indentions, e.g.,

LANGUAGES
. AMERICAN INDIAN LANGUAGES
. . NAVAJO

The Hierarchical Display can be useful to the indexer in finding the most appropriate level of specificity to which to index a document. The Descriptor Group Display arranges each of the approximately 5,000 Descriptors in the Thesaurus into one (and only one) of 52 broad categories. The display shows each of these categories together with alphabetic arrays of the terms that have been assigned to each. The display is provided for browsing and easy scanning of large numbers of Descriptors that may be of interest within a given area. It is meant to provide suggestions and to be of general assistance to those using the Thesaurus for indexing, searching, and the structuring of new Descriptors. It is not a formal classification scheme. Each Group is defined by a Scope Note and is represented by a three-digit code number. It is the code number that appears in the primary Alphabetic Display to communicate group assignment to the user.

7.3.2 Research in Education/ Current Index to Journals in Education

Prior issues of the announcement journals themselves can be useful (1) in determining how particular terms have been used by indexers in the past, i.e., what kinds of documents have they been applied to; (2) in determining how documents in a particular series have been indexed in the past; it is helpful to the users if documents in the same series are given a consistent indexing treatment and can be relied on to be retrievable via the same terms if they deal with the same subject.

7.3.3 Descriptor and Identifier Usage Report

This report (currently prepared on an annual basis) provides a complete record of the usage of each index term (both Descriptors and Identifiers) through the last complete complete year. There is an alphabetic array of every index term that has been used, together with a complete list of all accession numbers that have been indexed by the term, and including a count of how many accessions are listed. This document can be used as a comprehensive cumulative subject index for the entire file to date (without titles), but the indexer is more likely to use it to determine how many times a term has been used or whether two particular terms have both been used to index the same documents with any frequency. A very heavily used term may lead the indexer to feel that it lacks discrimination in the system; the indexer may proceed to use the term but may (as a result of the research into usage) employ additional terms to attempt to "zero in" on the subject matter better. A very lightly posted term, or one posted years ago but not used since, may lead the indexer to question the "currency" of the term and whether it is now much used by either authors or searchers.

7.3.4 ERIC Clearinghouse Scope of Interest Guide (Appendix C)

The Scope of Interest Manual provides a complete description of each Clearinghouse's area of coverage. It also presents lists, or mini-thesauri, of those Descriptors most frequently used by each Clearinghouse.

Inevitably some documents overlap between Clearinghouses. Often the Clearinghouse doing the processing of such a document can gain insight as to how the other Clearinghouse(s) would have indexed the document had it been assigned to them. Examination of this tool can prevent a narrow or parochial indexing approach and can lead to indexing from several potentially useful viewpoints rather than just that of the particular Clearinghouse in possession of the document.

7.3.5 Other Reference Sources

Dictionaries, encyclopedias, glossaries, handbooks, and major textbooks can all aid the indexer in translating the language of a given document into usable index terms. The jargon of specialized fields must be avoided in favor of terms more widely and authoritatively accepted. Terms having different meanings in different fields must not be confused with one another.

Reference works of particular value in researching terminology are listed in the bibliography accompanying the annual printed edition of the Thesaurus. Reference works of particular value in researching Identifiers (place names, project names, test names, etc.) are listed in Section 8.4.4 of this Manual.

Records of specific indexing decisions, made at Clearinghouses in problem cases, can be kept for future reference by subsequent indexers at that installation.

7.4 INDEXING PROCESS

7.4.1 General

Indexing begins with the examination of the document. Both indexing and abstracting for the ERIC system should be based on the entire document. Nevertheless, working indexers know that certain sections of documents yield useful information more readily than others. Knowing where to look and to concentrate one's attention can be important to capturing the essence of a document in the allotted time.

Index the document in hand, not some document the writer would like to have written or that he intends to write next time. Do not confuse speculation, or referrals to implications and possibilities, with real content.

The indexer should attempt to capture all significant concepts treated in the report. This is called indexing in-depth or exhaustive indexing. The indexer should index concepts at the generic/specific level actually covered by the document, i.e., index as generically as necessary, but as specifically as possible. For example, if the document concerns itself solely with the Navajo language, index to NAVAJO; do not index to the "higher" or more general levels

LANGUAGES or AMERICAN INDIAN LANGUAGES (See Section 7.4.5). Consistency is important in indexing, both between indexers and within the performance of a single indexer (self-consistency); it is notoriously difficult to attain. Whenever possible, indexers should proceed by rule, therefore, rather than by subjective decision. The indexer should be aware that specific entities such as geographic locations, project names, test names, individuals, etc., though not in the Thesaurus, are nonetheless indexable via the Identifier field. For a full discussion of the different types of Identifiers and how to structure such terms, see Section 8.4.

All concepts selected as significant in the document must be translated into either existing (or proposed) Descriptors and Identifiers. Use the Thesaurus (or Identifier Authority List) to do this; do not attempt to proceed on the basis of memory. A minor discrepancy in the spelling or ending of a Descriptor will lead to its later rejection by the computer system as invalid. The same type of minor difference in an Identifier will not cause it to be rejected, but will lead to "scattering", i.e., multiple word forms on the file and in the indexes for the same basic term. Scattering causes problems during retrieval.

The "Major" subject matters of the document, whether expressed as Descriptors or Identifiers, must be asterisked (*) in order to be able to restrict the size of the printed subject indexes. It is also useful later in machine searching in those instances where relevance is more important than recall. (See Section 7.4.5).

The purpose of indexing is to make a document retrievable. At all times the indexer should evaluate the concepts being selected in terms of a hypothetical searcher: Would a searcher after a particular concept be satisfied to retrieve this document? Would he be disappointed at the amount of information it contained on the indexed concept? Indexing is often described as being both a science and an art. It is scientific in that experimentation and practice over the years have derived good and consistent results. It is an art, however, in that as long as it is done by a human being it remains an expression of the individual judgment of the indexer and is not subject to rigorous consistency and exact results. The guidelines that follow do not and cannot always involve hard and fast rules. They provide indexers with a foundation and a philosophy, but only long experience and practical judgment can develop an expert.

7.4.2 Examination of the Document

The experienced indexer is familiar with the information system (documents, vocabulary, users, etc.) and in the examination of documents has learned to focus attention efficiently in several ways, thereby permitting perhaps as few as one or two passes through the document for its evaluation and analysis. The inexperienced indexer, on the other hand, typically requires several passes through the document and engages in excessive paging back and forth.

The indexer should first concentrate on building a basic frame of reference for a given document: (1) Its Source (the personal author, corporate author, and the sponsoring organization; (2) Its Publication Date and timeliness; (3) Its Format and general organization; (4) Its relationship to the entire system and its potential audiences. The indexer should come away from this brief step with a good idea of who did it, when, why, for whom, who paid, why it was selected, who might be interested, magnitude, etc.

The next step is to inventory and analyze the physical and organizational content: (1) Title; (2) Abstract; (3) Introduction/Preface/Foreword (which may include historical and theoretical background); (4) Description of methodology, experimental design, objectives, material used; (5) Work performed; (6) Discussion; (7) Results; (8) Illustrative material (graphs, charts, photographs, tables, diagrams); (9) Conclusions; (10) Summary; (11) Recommendations for further work; (12) References; (13) Appendixes; (14) Index. Content varies greatly among documents.

With this information in hand, the indexer can then proceed to a more detailed analysis of the document's subject content. This is usually done in a more selective journalistic sequence, concentrating on those sections revealed by the inventory above to be most information-bearing, e.g., Title, Abstract, Introduction, Methodology, Discussion, Illustrations, Results, Summary/Conclusions, References. The indexer should attempt to verify his or her interpretation of each section against following sections. For example, the Title should be compared with the Abstract, the Abstract with the Summary, and so on, until a clear, verifiable, supportable picture of what the document is really about emerges.

The relationship between the indexing process and the abstracting process should be noted here. The individual who abstracts a particular document inevitably absorbs much information regarding that document. This information may be utilized in the indexing process. This is particularly easy if the abstractor and the indexer are one and the same person. Indexing terms may be noted marginally or mentally during abstracting for later use (by oneself or others). If the abstractor and indexer are one person, then the learning-about-the-document process required to perform the one function overlaps with that required for the other function, thereby saving time overall. If the abstractor and indexer are separate individuals, then inevitably they must both go through the same learning process resulting in less efficient manpower utilization.

Whether the abstract is author-provided or written or modified within the ERIC system, it is a good idea to see that as many of the index terms as possible appear in the abstract. This provides the user with a reassuring explanation as to why a particular index term was used. In cases where there is no apparent or obvious connection between an index term assigned and the rest of the document description, the user is left puzzled as to whether the item is relevant to his needs.

7.4.3 Identification of Indexable Information

A primary rule is to index the document in hand. This rule may sound obvious, but it is easy to be trapped into indexing the implications, applications, projected uses, future directions, etc., of some documents rather than their actual content. This is a pitfall and should be avoided. For example, a bibliography of basic texts in adult education may have been originally compiled to support graduate study in adult education. Nevertheless, GRADUATE STUDY is not the subject matter of the document, but only one of many possible applications; it should not be selected as an indexable concept.

Negative results can be as indexable as positive results, and as important to the user. For example, a research study may tend to disprove the hypothesis that participation in program planning increases the student's interest in further education. The concept EDUCATIONAL

INTEREST is definitely indexable insofar as it is one of the primary ideas (in this case a "dependent variable") that the research is investigating.

The indexer must always keep in mind that it is concepts that are being indexed, not merely the author's words in which the concept is expressed. An author may choose to use excessively exotic, obscure, specialized, mis-interpreted, colloquial, or otherwise unacceptable language. Do not engage in mere "word indexing". Isolate the concept and meaning behind the words and then choose the words the system has designated for the concept. (Of course, insofar as it is possible to use the language and terminology of the author and still observe this admonition, then the best of both worlds is served.) For example, an author may use the term PREVOCATIONAL EDUCATION in discussing the basic education an adult needs in reading, writing, arithmetic, and social skills, before he can profit from a manpower training program. PREVOCATIONAL EDUCATION is defined by ERIC (based on Good's Dictionary of Education) as "an educational program providing shop and other experiences for exploratory and guidance purposes". The concept the author is really discussing is represented in ERIC by the Descriptor ADULT BASIC EDUCATION: "instruction of adults in subjects of elementary education, social skills". It must be kept in mind that authors do not necessarily use words precisely and that it is up to the information system to impose its own terminological order on a literature that speaks in many tongues and from many viewpoints.

Mere mention of any concept within a document does not mean that it is indexable information. If the concept was the reason for the document to be written, or, if without the concept the document would not exist or would be altered significantly, then the concept is indexable information. The indexer should assume the posture of a skeptic who has to be convinced by good evidence of the appropriateness and applicability of any given concept.

To ensure comprehensive and uniform treatment of documents, indexers should always refer to a checklist of indexable elements. The applicability of this checklist will help guarantee reasonable exhaustivity. Documents entering the ERIC system usually contain the following elements of information, which are treated individually in detail immediately following this list:

- Population Concepts
    - Grade/Academic Level
    - Other Groupings
- Activities/Action Concepts, Methodology/Material Concepts
- Curriculum Concepts
- Document Form/Type
- Identifiers

1. Population Concepts

Population concepts categorize and identify the group or individual studied by the report or intended as the users of the report. Most important to ERIC users are terms identifying the grade level/instructional program level/academic level of the group. However, other categories which may be applicable are: age, occupation, race, nationality, religion, intelligence or ability level, physical or emotional characteristics, socio-economic characteristics, involvement in a particular study or program, etc.

Examples of some terms in the Thesaurus which represent these various population concepts follow:

Grade/Academic Level - See Figure 7-1 for a complete list.

Age - e.g.,	INFANCY	(0 - 3)
	EARLY CHILDHOOD EDUCATION	(4 - 6)
	CHILDHOOD	(7 - 12)
	ADOLESCENCE	(13 - 17)
	YOUTH	(18 - 25)
	ADULT	(26 - 65)
	OLDER ADULT	(over 65)

Occupation - e.g., CARPENTERS
CHEMISTRY TEACHERS
COOKS
COUNSELORS
LIBRARIANS
MEDICAL LABORATORY ASSISTANTS
OPTOMETRISTS
TEACHERS

NOTE: See also list of Narrower Terms under term OCCUPATIONS.

Preschool/Elementary School Level

- Adult Basic Education (= Adult elementary education)
- Early Childhood Education (through Grade 2)
- Elementary Education
- Elementary Grades
- Elementary School Curriculum
- Elementary School Students
- Elementary Schools
- Grade 1
- Grade 2
- Grade 3
- Grade 4
- Grade 5
- Grade 6
- Grade 7
- Grade 8
- Intermediate Grades (= Grades 4-6)
- Kindergarten
- Kindergarten Children
- Middle Schools (= Grades 4-9 or some segment thereof; Use only if the document itself does)
- Nursery Schools
- Preschool Children
- Preschool Curriculum
- Preschool Education (= through Kindergarten)

Secondary School Level

- College Preparation
- Continuation High Schools
- Grade 9
- Grade 10
- Grade 11
- Grade 12
- High Schools
- Junior High School Students
- Junior High Schools
- Secondary Education
- Secondary Grades
- Secondary School Students
- Secondary Schools
- Senior High Schools
- Terminal Education

University/College Level

- Adult Education
- Adult Programs
- Career Education
- College Curriculum
- College Freshmen
- College Graduates
- College Instruction
- College Language Programs
- College Programs
- College Students
- Colleges
- Community Colleges
- Doctoral Programs
- Grade 13
- Grade 14
- Graduate Students
- Graduate Study
- Higher Education
- Inservice Education
- Junior College Students
- Junior Colleges
- Military Training
- Post Doctoral Education
- Post Secondary Education
- Professional Education
- Special Degree Programs (= Adults admitted because of life experience)
- Special Education
- Special Education Program
- Teacher Education
- Undergraduate Study
- Universities
- University Extension

FIGURES 7-1
GRADE/ACADEMIC LEVEL DESCRIPTORS

Race/Nationality - e.g.,

AMERICAN INDIANS
ANGLO AMERICANS
ARABS
CAUCASIAN RACE/CAUCASIANS
CHINESE AMERICANS
ESKIMOS
FILIPINO AMERICANS
INDIANS
ITALIAN AMERICANS
JAPANESE AMERICANS
JEWS
KOREAN AMERICANS
MEXICAN AMERICANS
MEXICANS
NEGROES
POLISH AMERICANS
PUERTO RICANS
SPANISH AMERICANS

Religion - e.g.,

AMISH
BRAHMINS
CATHOLICS
CHRISTIANITY
ISLAMIC CULTURE
JUDAISM
PROTESTANTS
PURITANS

Intelligence/Ability Level - e.g.,

ABLE STUDENTS
GIFTED
HANDICAPPED
HIGH ACHIEVERS
ILLITERATE ADULTS
MENTALLY HANDICAPPED
SUPERIOR STUDENTS
TALENTED STUDENTS

Physical/Emotional Characteristics, e.g.,

AMPUTEES
BLIND
DEAF
DEAF BLIND
EMOTIONALLY DISTURBED
HANDICAPPED
HOSTILITY
HYPERACTIVITY
MONGOLISM
NEUROLOGICALLY HANDICAPPED
PARANOID BEHAVIOR
PHYSICALLY HANDICAPPED
PSYCHOSIS
QUADRIPLEGIA
SCHIZOPHRENIA

Socioeconomic Characteristics - e.g.,

ADOPTED CHILDREN
CRIMINALS
DELINQUENTS
ECONOMICALLY DISADVANTAGED
FOSTER CHILDREN
MIGRANTS
NOMADS
PRISONERS
REFUGEES
SOCIALLY DISADVANTAGED
SOCIALLY MALADJUSTED

2. Action Concepts and Material Concepts

Activities or action concepts include "Teaching", "Testing", "Experimentation", and the like. Examples of methodology and materials concepts are "Language Laboratories", "Programed Tests", "Filmstrips", etc. Often a decision must be made as to whether the document is about the activity, about the materials, or about both. (In certain instances, the activity and the methodology might be essentially the same). For example, if a document is about testing, making only slight mention of methods and specific tests, then it should be indexed by TESTING. If it is about the development or use of a specific kind of test (for example, aptitude tests), then it should be indexed by APTITUDE TESTS, and not by TESTING. If, however, the document is about testing, and various aptitude tests were used, it should be indexed by TESTING, by APTITUDE TESTS, and by the names of the specific aptitude tests for which data and results were presented.

3. Curriculum Concepts

This refers to the educational subject or concept which is being administered, taught, or measured. Examples are ARITHMETIC, HISTORY, LEARNING DISABILITIES, READING, SPATIAL PERCEPTION, and the like. Those concepts which are actively and substantially treated by the document are indexable. For example, if a teaching method is used for arithmetic and this is reported and described in detail, then the document should be indexed by ARITHMETIC, along with a term describing the method, the persons being taught, etc. However, if the document mentions that this method might also be used for teaching music, but does not describe this use of the method, then the document should not be indexed by MUSIC.

4. Document Form/Type

It is a valid indexing concern to wish to record and store the information that a document is a bibliography or a textbook or a curriculum guide. Use of such specific information can often aid retrieval. For example, a search for textbooks on mathematics for adults probably would not wish to retrieve documents dealing with textbook writing. The former can be indexed by TEXTBOOKS; the latter by TEXTBOOK PREPARATION. Similarly, specific curriculum/guides can be distinguished from the act of curriculum preparation by using the Descriptors CURRICULUM GUIDES and CURRICULUM DEVELOPMENT, respectively. Not all situations can be handled in this manner, and it may be necessary to rely on coordination of index terms to distinguish concepts. Even so, an item that is a Directory will still be difficult to distinguish from an item about Directories.

From ERIC's beginning in 1966 through mid-1974, the only way to index by document/publication form or type was via Descriptors or Identifiers. In mid-1974 the "Publication Type" data element was added to the ERIC Resume Form and catalogers began automatically tagging each and every accession with a code representing its form (See Section 5.3.16). With the inception of this new cataloging data element (which is machine manipulatable and can be searched or made to print out with each resume) it becomes less important for indexers to index by form and they should be generally discouraged from doing so. Nevertheless, there will still be situations where the indexer's judgment will call for an index entry by form, particularly to aid users in manual use of the printed indexes. Good examples of important and useful printed index headings are BIBLIOGRAPHIES and LITERATURE REVIEWS.

Descriptors in the Thesaurus that are available for use as form designations (as well as subject matter designations, are as follows:

ABSTRACTS
ADMINISTRATOR GUIDES
ANNOTATED BIBLIOGRAPHIES
ANNUAL REPORTS
ATLASES
AUDIOVISUAL AIDS (About 30 kinds of specialized aids)
BIBLIOGRAPHIES
BOOK CATALOGS
BOOK LISTS
BOOK REVIEWS
BOOKS
BULLETINS
CLASS NEWSPAPERS
COMPUTER PROGRAMS
CONFERENCE REPORTS
CURRICULUM GUIDES
DIRECTORIES
DOCTORAL THESES
ENCYCLOPEDIAS
FILMS
GLOSSARIES
GUIDES
HISTORY TEXTBOOKS
INDEXES (LOCATERS)
LABORATORY MANUALS
LEADERS GUIDES
LIBRARY GUIDES
LITERATURE GUIDES
LITERATURE REVIEWS
MANUALS
MAPS
MASTERS THESES
NEWSLETTERS
NEWSPAPERS
PERIODICALS
PHONOTAPE RECORDINGS
PROGRAM DESCRIPTIONS
PROGRAMED TEXTS
PUBLICATIONS
RESEARCH PROPOSALS
RESEARCH REVIEWS (PUBLICATIONS)
RESOURCE GUIDES
SCHOOL NEWSPAPERS
SERIALS
SPEECHES
STATISTICAL DATA
STUDY GUIDES
TABLES (DATA)
TAPE RECORDINGS
TEACHING GUIDES
TEACHER DEVELOPED MATERIALS
TECHNICAL REPORTS
TESTS (About 30 kinds of specialized tests)
TEXTBOOKS
THESAURI
YEARBOOKS

5. Identifiers

Proper names of persons, geographical locations, trade names, projects, and the like, are frequently part of a document's indexable information. These highly specific terms (multitudinous and often transient) usually are not appropriate for the Thesaurus. Nevertheless, they can be highly useful access points for the users and must be taken into account in the indexing process. The ERIC solution to this problem is to create a relatively "free" and open subject indexing field called the Identifier field. Identifiers are not rigidly defined, structured, and controlled like Descriptors, however, in order to avoid excessive scattering under different word forms, and to aid retrieval, certain standards are observed in their construction. Identifiers are discussed in detail in Section 8.4., and an Identifier Authority List (for the most frequently used Identifiers) appears as Appendix F. Some categories of Identifiers are Acronyms, Coined Terminology, Equipment Names, Geographic Locations, Theories, Personal Names, Projects, Tests, Trade Names, Organizations, and the like.

Selection of Identifiers should be made on the same basis as selection of Descriptors. The Identifier should be considered indexable information if the document contains significant and substantial enough information on the Identifier to justify later retrieval. To provide some examples, a document which reports on research that exploited Piaget's theory of concept formation is not actually concerned with the theory per se. However, the inclusion of PIAGET'S THEORY as an Identifier would probably be justified because of the interest of researchers in isolating the various applications of the theory. A statistical study which happened to run its data through an IBM-360/40 computer should not be indexed by IBM 360 insofar as the type of computer is probably completely incidental to the results; the data could have been arrived at via any number of computers. A paper dealing with unemployment among female teachers in New England should be indexed by the geographic Identifier NEW ENGLAND. New England is not the main topic per se, but the area of the country inhabited by subjects of a study can be crucial to the meaning and usage of the document and the results reported.

All Identifiers appear in the Resume section of Research in Education and those that are asterisked as Major terms appear in the printed subject indexes. There is no minimum requirement for Identifiers; no more than one Identifier should be designated as Major.

7.4.4 Translation and Negotiation (Indexable Concepts Into Approved Terminology)

Use of an Exact Equivalent, Synonym, Broader Term, or Two Terms Coordinated

The concepts which have been listed (in the author's or indexer's terminology) as candidates for Descriptors must be translated into the language of the *Thesaurus*. Each concept must be compared with terms in the *Thesaurus* to determine: (1) whether an exact equivalent already exists; (2) whether a synonym (or near synonym) already exists; (3) whether a Broader Term in the *Thesaurus* is adequate for retrieval of the concept; (4) whether two or more different existing terms in the *Thesaurus* can be coordinated for retrieval of the concept; or (5) whether it is necessary to introduce a new term into the *Thesaurus* in order to cover the concept.

As the indexer attempts to locate applicable terms, the latest edition of the *Thesaurus* (Alphabetic Display) should be used, together with the monthly update sheets (showing new terms added that month) transmitted from the Facility since the last edition. The various other permutations of the *Thesaurus* vocabulary described in Section 7.3 ("Indexing Tools") should be used as necessary; the Rotated Display is of particular value, but it must be kept in mind that it does not contain synonyms.

Application of the translation process can best be shown through the use of examples. Let us say that a document reports research on the differences in attitudes toward a job (environment, coworkers, and employers), and general adjustment to the work environment, of various sub-groups of automobile mechanics, i.e., (1) those who were dropouts with on the job training; (2) high school graduates in trade and industrial education; and (3) high school graduates who had taken courses in industrial arts. The personal traits of the workers are discussed. The comparisons are based on employers' evaluations of the workers, and workers' responses to an attitude scale. The high school curriculum in trade and industrial education is discussed in a separate chapter. The list of candidate concepts as first written by the indexer is as follows:

Automobile Mechanics
Job Attitudes
Work Environment
Employers
Coworkers
Adjustment
High School Dropouts
On the Job Training
High School Graduates
Industrial Arts
Trade and Industrial Education
High Schools
Comparisons
Employer Evaluation
Personal Traits
Attitude Scales
Trade and Industrial Curriculum

The first concept is "Automobile Mechanics". AUTO MECHANICS is listed in the Rotated Display, so we look at the full display in the Thesaurus. Since the Broader Term (BT) is INDUSTRIAL ARTS, it is obvious that the term AUTO MECHANICS is not a concept referring to persons, so it is not an acceptable Descriptor. There is no term MECHANICS in the Thesaurus. If there were such a term, and it had a parenthetical qualifier (OCCUPATIONS) or (PEOPLE), it might be coordinated with MOTOR VEHICLES to retrieve information on automobile mechanics. A decision must be made: Should we introduce a new term, and if so, which one, AUTOMOBILE MECHANICS (OCCUPATION) or MECHANICS (OCCUPATION)? Since we anticipate handling other studies about automobile mechanics, we choose to INTRODUCE A NEW TERM, in this case the precoordinated term, AUTOMOBILE MECHANICS (OCCUPATION).

"Job Attitudes" is the next concept. Since that exact term does not appear in the Thesaurus, we look for the BT "Attitudes", and study the display for ATTITUDES. WORK ATTITUDES appears as a Narrower Term (NT) under ATTITUDES. We look at the display for WORK ATTITUDES. WORK EXPERIENCE is shown as a Related Term (RT). So we assume that, since WORK ATTITUDES is related to WORK EXPERIENCE, this makes it an acceptable Descriptor. We will USE A NEAR SYNONYM in this case. It would be useful to introduce JOB ATTITUDES as a synonym for WORK ATTITUDES, through the use of the Descriptor Justification Form (See Section 8.5).

"Work Environment" is not listed in the Thesaurus, but many other kinds of environment appear in the Rotated Display, including ADJUSTMENT (TO ENVIRONMENT), another concept on our list of candidates. We will sidetrack to look at that display. VOCATIONAL

ADJUSTMENT is an NT, and although its display does not clarify its use, we will assume that it is closer to the concept of adjusting to work than its BT. Can we assume that VOCATIONAL ADJUSTMENT and WORK ATTITUDES imply adjustment to and attitudes towards people, physical environment, and all the elements of a job? If we make this assumption, it is necessary to use Descriptors for the individual elements only if we feel that they are so important a part of the study that each merits a separate Descriptor. Here we decide that A BROADER TERM IN THE THESAURUS IS ADEQUATE FOR RETRIEVAL.

"High School Dropouts" does not appear in the Rotated Display, but it is in the Thesaurus, with a note Use DROPOUTS. NT's are URBAN DROPOUTS and RURAL DROPOUTS. Examination of the documents shows that the dropouts we are concerned with are not identified more specifically as urban dropouts or rural dropouts, so DROPOUTS appears to be the most appropriate term. Here we USE A SYNONYM OR NEAR SYNONYM. We examine the RT's to see if other terms are suggested which would be appropriate in describing our document. and decide they are not.

"On the Job Training", "Trade And Industrial Education", "Industrial Arts", and "High Schools" all appear as Descriptors in the Thesaurus, so we USE EXACT EQUIVALENTS.

"Comparison" is not in the Thesaurus, but COMPARATIVE STUDY appears as a UF for COMPARATIVE ANALYSIS so we use the latter term, which is A SYNONYM OR NEAR SYNONYM.

"Employer Evaluation" does not appear in the Thesaurus, but we find EMPLOYER ATTITUDES and EMPLOYER EMPLOYEE RELATIONSHIP. A decision must again be made on whether to accept one or both of the existing terms or introduce a new term. "Employer Attitudes" are continually reflected in the employer's evaluation, but these appear to be two completely different ideas. The employer-employee relationship is part of what is being evaluated, but we have already decided that the separate parts of the situation do not justify separate indexing, as we have used

WORK ATTITUDES and VOCATIONAL ADJUSTMENT to cover the whole picture. Introduction of a new Descriptor appears necessary, so we examine the display for EVALUATION. Previous pre-coordination appears to be between EVALUATION and what is being evaluated, e.g., STUDENT EVALUATION appears to be evaluation of students, etc. This means we must change our term to EMPLOYEE EVALUATION. This is a term which must be pre-coordinated because EVALUATION would coordinate with other terms we have chosen and produce false drops, (e.g., EVALUATION and ON THE JOB TRAINING, EVALUATION and INDUSTRIAL ARTS, etc., none of which are being directly evaluated.) Searching for definitions may show us that PERSONNEL EVALUATION is a more useful term, since it could include a wider range of people, and in choosing new terms we try to foresee their usefulness in other situations. Here, we INTRODUCE A NEW TERM.

Do we need to introduce the term EMPLOYERS since they did the evaluating? How crucial is that concept to the study? Does it merit indexing? Since the employer is normally the person to evaluate an employee, and since we have decided that JOB ATTITUDES and VOCATIONAL ADJUSTMENT relate to all the aspects of work including the employer, we decide it is not necessary to introduce EMPLOYERS as a new term.

"Personal Traits" is another candidate. Examining TRAITS in the Rotated Display offers no suggestions. "Traits" are "characteristics", so we look at CHARACTERISTICS. INDIVIDUAL CHARACTERISTICS seems to be an appropriate term, and again we use A SYNONYM OR NEAR SYNONYM.

"Trade and Industrial Curriculum" does not appear in the *Thesaurus*, but a number of other subject curriculums are listed as NT's (e.g., ENGLISH CURRICULUM, MATHEMATICS CURRICULUM, etc.). We need to consider whether we should introduce another pre-coordinated term or depend upon the coordination of terms (TRADE AND INDUSTRIAL EDUCATION and CURRICULUM) already in the *Thesaurus*. Even though recognize that CURRICULUM might coordinate with INDUSTRIAL ARTS to give a false drop, we decide to use it. Thus we USE TWO OR MORE TERMS ALREADY IN THE THESAURUS WHICH CAN BE COORDINATED FOR RETRIEVAL.

"Attitude Scales" is the last candidate. ATTITUDE TESTS in the *Thesaurus* can be used for this concept, so we USE A SYNONYM OR NEAR SYNONYM again.

Throughout the translation process, an attempt should be made to index concepts as specifically as the *Thesaurus* will allow. If a document refers to handicapped children, use HANDICAPPED CHILDREN instead of CHILDREN and HANDICAPPED. However, if the document refers to all kinds of children, and "handicapped children" does not merit indexing, then CHILDREN would be the appropriate term. If there is information on CHILDREN generally, and HANDICAPPED CHILDREN specifically, then both CHILDREN and HANDICAPPED CHILDREN are appropriate Descriptors.

Use of a New Descriptor/Identifier

If the indexer has arrived at the decision that a new Descriptor will be recommended, it is necessary to: (1) research the term; (2) locate authorities that can be cited as to its meaning and use; (3) develop a definition or scope note; (4) detect synonyms in whose place the new term will be used; (5) place the term somewhere in the hierarchy of existing terms, identifying some terms as Broader (higher in the generic tree), some terms as Narrower (lower in the generic tree), and some as Related (on adjacent branches). The resultant recommendation is transmitted to the ERIC Facility (either with the document to which it pertains, or in advance), where it is subjected to intensive analysis and coordination with other term recommendations from other sources.

The procedure for doing this is described in Section 8.5 ("Vocabulary Development and Maintenance - Descriptor Coordination Procedure") of this Manual.

7.4.5 Special Issues

Indexing Specificity

A fundamental principle of coordinate indexing is to index at the level of specificity of the document in hand. This principle has been referred to earlier, however, enough problems arise in the implementation to warrant a separate discussion.

For purposes of illustration, let us look at the indexes to two issues of Research in Education (1967, #7 and #8). (The examples have been selected for purposes of illustration; there may have been at the time several reasons for violating the specificity rule.)

1967, #7 - Under BIBLIOGRAPHIES, note a number of "annotated bibliographies" that were not indexed under the specific Descriptor ANNOTATED BIBLIOGRAPHIES.

#8 - Under EVALUATION, note a document dealing with "program evaluation".

#8 - Under FACILITIES, note a document dealing with "educational facilities".

In all these cases, documents were indexed at a higher or more generic level than the document discussed. Problems arise because a user of issue #8 of RIE does not know (since there are no "see also" references in the subject index) that he must look under both FACILITIES and under EDUCATIONAL FACILITIES to retrieve references relevant to the latter topic. There are at least three particular situations when an indexer must consider this question of generality/specificity especially carefully. These are:

1. When a document discusses a concept at both a general and specific level; e.g., a document describing intelligence tests in general, and specific tests as well, in about equal detail.

2. When a document discusses a specific (species) concept, but the indexer thinks the document adds useful information to the body of knowledge about the general (genus) concept.

3. When a document discusses many specifics of a general (genus) concept, but none in sufficient detail to merit the indexing of each specific concept.

With reference to (1) above, an indexer might consider, for example, both the general concept "intelligence tests" and the specific Identifier, Detroit Advanced Intelligence Test, as indexable concepts. If there is a sufficient amount of information worth indexing (always a matter of judgment) about both general and specific concepts, then ~~they are~~ both indexed. Document ED 010 923, indexes both HANDICAPPED CHILDREN and MENTALLY HANDICAPPED, because the document discusses specific types of handicaps as well as the general problem of handicapped children.

In the case of (2) above, the indexer may index at the general level, even if the general concept is not discussed per se. For example, a very extensive description, study, or review of the well known Wechsler Adult Intelligence Scale (WAIS) should be indexed by INTELLIGENCE TESTS, as well as by an Identifier. If the ERIC system covered only the literature of educational tests and measurement, this guideline might not be given. However, since ERIC's users are likely to be interested in the whole area of tests at varying levels of specificity, this document should be made accessible at a "reasonably" general level (i.e., INTELLIGENCE TESTS, not TESTS) and at the level of the specific test name as well. This guideline requires technical exertise, knowledge of the system's users, and mature judgment.

The third area, (3) above, is perhaps the most troublesome. The indexer must develop a "feel" for what is sufficient or reasonable information about a concept that makes it "indexable". Experience in reviewing search results, as well as in indexing, can be helpful in this area. Some examples may illustrate this problem.

Example 1:

> Document ED 010 856 indexes AGRICULTURAL PERSONNEL. As the abstract indicates, the population of participants included extension personnel, agricultural teachers, home economics teachers, forestry personnel, and professional employees in agribusiness. In the judgment of the indexer, there was insufficient data about the various groups to merit indexing each specific occupational group. The groups, however, were part of the class "agricultural personnel", and that concept only was indexed. (Parenthetically, we note that EXTENSION AGENTS was also indexed, perhaps reflecting the particular Clearinghouse's special interest in that concept).

Example 2:

> In describing the population of its study, a document lists in tables their age, sex, educational level, and participation rate of conference attendance. The indexer must decide whether the information provided is significant enough to index specifically. Since none of the above factors were variables in the study, the indexer decided to index the group of concepts at the generic level PARTICIPANT CHARACTERISTICS.

Example 3:

> A document entitled "Guidelines for the Referral of Children Who Are Suspected or Known to be Exceptional" describes and defines in detail the crippled and health impaired, hearing impaired, deaf, blind, partially seeing, emotionally disturbed, socially maladjusted, educable mentally handicapped, trainable mentally handicapped, multiple

handicapped, and gifted. Because of the amount of detail provided for each category, the indexer decides that this document should be retrievable through the generic concepts "Exceptional Children" and "Handicapped Children", as well as through each specific area of exceptionality mentioned above.

Example 4:

A program guide entitled the "La Grange Area Department of Special Education Handbook" describes a sizable, reputable program which includes education of the mentally handicapped, physically handicapped, socially maladjusted, and emotionally disturbed. However, nearly all guides for "Special Education" programs include and describe each of these areas. The information on each area of exceptionality is usually similar throughout these guides. Their inclusion in such a guide is implicit and need not be indexed. In contrast to the previous example, the areas of exceptionality covered are not indexable information. The document should be indexed by the concepts "Program Guide" and "Special Education", and terms representing its grade level and origin (school district).

Major/Minor Index Terms

The ERIC indexer is required to identify the "Major" and most important concepts contained in a document by immediately preceding the equivalent term or terms selected with an asterisk (*). The rule is that at least one (1) and not more than five (5) Descriptors may be designated as Major; only one (1) Identifier may be designated as Major. All index terms not preceded by an asterisk are automatically considered "Minor" for that document. Any index term may be Major or Minor, depending on the document.

The purpose of this arrangement is:

o to identify for the reader of RIE the chief or major concepts in the document, thereby providing him with additional information and help in his search and evaluation of the Resumes.

- to provide at least one subject route to the document in RIE, but not so many as to make the indexes excessively large.
- to provide searchers of the data base the capability of designing either broad, exhaustive searches that aim at comprehensive recall of all references on a subject, or narrower, targeted searches that aim at selective retrieval of some (but perhaps not all) references highly relevant to the subject.

As with the Generic/Specific guidelines, sufficient problems arise in the implementation of the Major/Minor guidelines to warrant additional discussion and examples.

The most frequent problem occurs when the Major terms that emerge from the author's treatment are so specialized as to not be useful access points in the Subject Index to RIE (i.e., the user simply won't think to look under them). This conflict between accurate selection of the Major terms to fit the document emphases, and utility to the user of the printed indexes, should usually be resolved in favor of the user. In other words, don't let rigid and unbending adherence to the rules lead to indexing which is clearly not as practical or helpful as it could be.

Again, an example can help make this point.

Example:

Title: Group Composition Models for Laboratory Design

Subject: Study of the effects on learning of various groupings of persons for purposes of sensitivity training; in particular the author examines the structured group versus the unstructured group, and the homogeneous versus the heterogeneous group.

Descriptors:

Majors Selected Somewhat Rigidly:

Adult Learning; Evaluation; Group Dynamics; Grouping Procudures; *Group Structure; *Heterogeneous Groupings; *Homogeneous Groupings; Research; Sensitivity Training; Training Laboratories

Majors Selected with User More in Mind:

*Adult Learning; Evaluation; *Group Dynamics; Grouping Procedures; *Group Structure; Heterogeneous Groupings; Homogeneous Groupings; Research; *Sensitivity Training; Training Laboratories

The first selection of Majors adheres to the guidelines well enough, and follows the terminology in the abstract closely, but still doesn't manage to provide enough useful routes to the document for the reader of RIE scanning it as a current awareness service. The chances are that a user interested in keeping abreast of current research related to adult learning using group processes and the educational implications of group relationships, would look under ADULT LEARNING, GROUP DYNAMICS, or perhaps SENSITIVITY TRAINING. Conversely, chances are that he would be less likely to look under the more specialized terms HETEROGENEOUS GROUPING or HOMOGENEOUS GROUPING, or under the more broadly applicable GROUP STRUCTURE. The designation of Descriptors as Major often has to take account of the fact that a general class or area, by which the document is indexed, will be more meaningful in the back-of-the-issue subject indexes than a more obscure highly specialized term. Not all documents pose this problem. However, it is easy for a specialized Clearinghouse (or any specialist) to confuse their own viewpoint and interests with those of all other users. It is wise, therefore, during the indexing process to step back at least once and consider the potential usefulness of a document to all types of users of educational information.

The occasional need to identify terms as major that are at the more general end of the spectrum of terms assigned to the document (e.g., GROUP STRUCTURE in lieu of HETEROGENEOUS GROUPING) has an effect that the searcher must bear in mind. In this instance, for example, a narrow and selective search for studies involving HETEROGENEOUS GROUPING techniques would have to search on the term as a Minor in order to retrieve the document described in the example. This is contrary to the usual practice of relying on the Major terms if you want high relevancy.

Excessively broad terms (e.g., DEVELOPMENT), which lack discrimination, and which if used without restraint might collect large numbers of postings in a single journal issue, should also be avoided as Majors, just as they should generally be avoided in the indexing process as a whole. Examples of very broad Descriptors that should be used very selectively and only in situations really calling for them are:

ABILITY
ATTITUDES
BACKGROUND
BEHAVIOR
DATA
DEVELOPMENT
EDUCATION
ENVIRONMENT
EVALUATION
GROUPS
GUIDES
INSTRUCTION
LEARNING

METHODS
NEEDS
OBJECTIVES
PERFORMANCE
PLANNING
PROBLEMS
PROGRAMS
RESEARCH
SCIENCES
STUDY
TEACHING
TECHNIQUES
THEORIES

7.4.6 Indexing Review

After the indexer has completed all the basic tasks involved in indexing: examination of the document, identification of indexable concepts, translation of selected concepts into Thesaurus terminology, tagging of major concepts/terms, recommendations for new terms (completion of Descriptor Justification Form), recording of final terms on Resume Form, etc., the finished product should receive a final review. This review may be accomplished by the indexer or by a Supervisor/Reviewer. The following questions should be asked about the work:

1. Do the designated Major terms represent the emphasis of the document?
2. Are the Major terms reflected in the abstract or Title, so that there may be no question in the user's mind about their relevance?
3. Are the possibilities for "False Drops" minimal?
4. Are all significant and important concepts in the document covered by Descriptors?
5. Can the index terms be fitted together in narrative form to provide an accurate idea of the subject matter of the document?
6. Has excessive "clustering" of terms beginning with the same word been avoided?
7. Do the Major terms provide a class description that could be expected to occur spontaneously to a user, or are they too specialized and obscure?
8. If the scope of the document overlaps with other Clearinghouses, have their viewpoints been taken into account (e.g., via examination of their scope of interest statement and "most frequently used Descriptors" list?).

See also the "Summary of Significant Rules" appearing at the beginning of this Section.

7.4.7 Recording Indexing on Resume Form

The rules for transcribing onto the Resume Form all Descriptors and Identifiers finally selected to index a document, and for identifying them as Major or Minor, are provided in the "Descriptive Cataloging" Section of this Manual (Sections 5.3.20 and 5.3.21, respectively).

SECTION OUTLINE

PAGE

8.1 INTRODUCTION 265
- 8.1.1 Thesaurus - Definition and Function 265
- 8.1.2 Descriptors - Definition and Function 265
- 8.1.3 Identifiers - Definition and Function 266
- 8.1.4 Educational Terminology 266

8.2 LEXICOGRAPHY 267
- 8.2.1 General 267
- 8.2.2 Principal Functions 268
  - Maintain Consistency 268
  - Avoid Proliferation 269
  - Clarify Ambiguity 270
  - Conform to Existing Rules and Guidelines 271
- 8.2.3 Generic Structuring 271

8.3 THE THESAURUS OF ERIC DESCRIPTORS 277
- 8.3.1 Background 277
- 8.3.2 Divisions of the Thesaurus 278
  - Alphabetic Display 278
  - Rotated Display 279
  - Hierarchical Display 279
  - Descriptor Group Display 280
- 8.3.3 Rules for Thesaurus Preparation 280

PAGE

8.4 IDENTIFIERS 292

8.4.1 General 292

8.4.2 Rules for Identifiers 292

8.4.3 Categories of Identifiers 294

1. Acronyms 294
2. Coined Terminology 295
3. Conferences/Meetings/Seminars/Symposia 295
4. Course Catalog Listings 295
5. Equipment 295
6. Ethnic Groups/Tribes 295
7. Geographic Locations 296
8. Legislation 296
9. Methods and Theories 297
10. Personal Names 297
11. Projects 297
12. Tests and Testing Programs 298
13. Textbooks 298
14. Trade Names 299
15. Organizations 299

    a. Community Organizations 299
    b. Educational Organizations 299
    c. Foundations 299
    d. Government Agencies 300
    e. Industrial Organizations 300
    f. Professional Organizations 300
    g. School Districts 300

8.4.4 Identifier Authority List 301

8.5 DESCRIPTOR COORDINATION PROCEDURE 304

8.5.1 Appraisal of Potential New Descriptors 304

8.5.2 Generation of Candidate Descriptor Recommendation 306

8.5.3 Descriptor Justification Form (DJF) 307

Line Spacing 307
Character Limitations 307
Field Length 308

Descriptors 308
Group Code 311
Scope Note 311

PAGE

Submitting a New Term 312

1. Main Term 312
2. Group Code 312
3. Scope Note 313
4. Broader Terms 315
5. Narrower Terms 316
6. Synonyms (Used For) 317
7. Related Terms 318

    a. Closely Related in Meaning 319
    b. Near Synonyms 319
    c. Near Antonyms 319
    d. Having the Same Broader Term 319
    e. Related in Usage or Application 321
    f. Part-Whole Relationship 321

8. Information Block 322

    a. Indexer and Clearinghouse 322
    b. Supervisory Approval and Date 322
    c. Accession Numbers 322
    d. Authorities Used 322
    e. Definition of Term 323

Modifying An Existing Term 324

1. Action Codes 324

    a. Add 324
    b. Delete 325
    c. Change 325

2. Group Code Changes 325
3. Scope Note Changes 326
4. Generic Structure Changes 326

    a. Broader Term Changes 326
    b. Narrower Term Changes 327
    c. Hierarchical Insertions 328

5. Synonym (Used For) Changes 329
6. Related Term Changes 330
7. Information Block 332

PAGE

Transmittal of DJF 332

1. RIE Shipments 332
2. CIJE Shipments 332
3. Thesaurus Changes 332

ERIC Facility Processing 332

8.6 VOCABULARY IMPROVEMENT PROGRAM 334

8.6.1 Background 334

1. Vocabulary Development 334
2. Vocabulary Problems 335

8.6.2 Vocabulary Improvement (Types of Changes) 337

8.6.3 Descriptor (Thesaurus) Changes 338

1. Descriptor Editing Based on Usage 338
2. Elimination of Postable Synonyms 339
3. Thesaurus Change Procedure 339

8.6.4 Identifier Changes 348

1. Identifier Scattering 348
2. Sources and Information 349
3. Review and Edit 349
4. Coordination 349
5. Implementation and Dissemination 349

FIGURES

PAGE

8-1 ERIC Descriptor Justification Form 309-310

8-2 Thesaurus Change Procedure 340

8-3 ERIC Thesaurus Term Change Notice 345-346

A. Blank Form 345
B. Completed Form 346

VOCABULARY DEVELOPMENT AND MAINTENANCE

Summary of Significant Rules

1. The total indexing vocabulary consists of both Descriptors and Identifiers. Descriptors and Identifiers provide tags or handles for the subject concepts dealt with by documents stored in the ERIC system. A term can be established in the ERIC vocabulary only if the concept it represents is found in actual documents processed by the system.

2. Descriptors are formally controlled, structured into hierarchies, and cross-referenced. References are made from synonyms and near-synonyms to preferred word forms. All Descriptors are displayed in the Thesaurus of ERIC Descriptors, which is available in four sequences: Alphabetic Display, Rotated Display (obviates the need for inverted entries), Hierarchical Display, Descriptor Group Display. Descriptors may be single or multi-word terms. Multi-word terms are justified whenever single-word terms cannot adequately describe concepts which are acceptable and meaningful within relevant user groups.

3. The Descriptor Justification Form (DJF) must be used to enter (or modify) Descriptors in the Thesaurus. The DJF permits entry of possible Synonyms (UF), Broader Terms (BT), Narrower Terms (NT), Related Terms (RT), a Scope Note, and a Descriptor Group identification code (mandatory). Full justification must be provided on the DJF for all candidate Descriptors, including authorities cited and definitions. A Scope Note is a brief statement of intended usage, for the purpose of either restriction or explanation; they are not intended as formal definitions. Scope Notes are not mandatory but are highly recommended for terms whose meaning is not completely self-evident.

4. Thesaurus hierarchies are subject to the following basic rules:

   - The BT-NT relation is one of class membership. An NT must be entirely a member of the class defined by its BT.

   - Close conceptual relationship among Descriptors not in the same hierarchy should be displayed via the RT cross-reference.

   - All cross-references must be reciprocal, i.e., for every entry, a corresponding complementary entry must appear elsewhere. That is, for every USE entry, there is a UF entry; for every NT, there is a BT; for every BT, there is an NT; for every RT, there is another RT.

5. The principal mechanics of Descriptor construction are as follows:

   - Abbreviations should be avoided; they may be treated as synonyms and cross-referenced
   - Maximum Descriptor length is 50 characters, including spaces
   - Noun forms are preferred to verb forms
   - The plural form is used for "count nouns" (e.g., ATTITUDE TESTS), about which one may ask "how many?"
   - The singular form is used for "mass nouns" (e.g., AUDIENCE PARTICIPATION), about which one may ask "how much?"
   - Descriptors judged to be homographs must have parenthetic qualifiers (e.g., CASE (GRAMMAR)).
   - Descriptors may consist of alphabetic characters, Arabic numerals, left and right parentheses, and blanks (spaces between words). No other special characters are permissible.
   - Inverted entries (e.g., PLANNING, FACILITIES) should be avoided.

6. Identifiers are names of specific entities, e.g., projects, geographic locations, persons, trade names, tests, legislation, equipment, organizations, etc. Identifiers are intended to supplement Descriptors by providing for indexing depth of a specialized nature. Identifiers are not hierarchically structured, cross-referenced, or defined, and they do not appear in the Thesaurus. Standards must be followed in Identifier construction, however, to avoid excessive "scattering" under variant name forms. (See Section 8.4.3 and Appendix F, Identifier Authority List).

7. The Vocabulary Improvement Program provides a mechanism for eliminating ambiguous, outmoded, or unused terminology in the ERIC vocabulary. Continuous, long-term improvement is emphasized over short-range intensive efforts. System-wide participation is also emphasized and vocabulary change recommendations are solicited from all components of the system and from all user groups. A nationwide review group evaluates changes recommended by users.

8.1 INTRODUCTION

8.1.1 Thesaurus - Definition and Function

A thesaurus developed for information retrieval purposes is a term-association list structured to enable indexers and subject analysts to describe the subject content of a document to a desired level of specificity at input, and to permit searchers to describe in precise terms the information required at output. A thesaurus serves as an authority list of the filing labels which permit information to be stored by one person and retrieved by another. It is a device to bring into coincidence the language of the documents and the language of indexers and inquirers.

A thesaurus of descriptors, interrelated by cross-references, provides the basic rules of communication for an information system. As an information system grows, its thesaurus can be systematically built and refined to the point where it represents, in a sense, the vocabulary of the subject field involved. A functional thesaurus must be logical and accurate and have an internal integrity in relation to the guidelines upon which it has been built. The ultimate success or failure of a thesaurus depends, however, on the extent of its usefulness as a communication tool in an information system.

8.1.2 Descriptors - Definition and Function

Descriptors are meaningful terms or short phrases that are used to characterize a document and to provide index entries to it. Descriptors, for the most part, represent concepts or general classes of things discussed in the literature. Many Descriptors will be found in the general authoritative dictionaries, while the remainder can usually be located in one or more specialized dictionaries. They are the basic building blocks that, when defined and interrelated by a system of cross-references, comprise an information retrieval thesaurus. Descriptors perform a dual function: (1) they permit an indexer to describe the subject elements of a document so that it (or a surrogate record) may be stored in a system for future search and retrieval purposes; (2) they permit a searcher to construct a question using terms that are known to have been used in indexing. In both instances, the extreme variability of the language found in documents and the language used by inquirers has been reduced by reliance on a standard vocabulary. In this sense, the descriptors represent the communication link between the operators and users of the system and its content. Descriptors are closely related (but not identical) to both the "Subject Headings" that one finds in conventional library systems and the "Keywords" that one finds in text processing or uncontrolled vocabulary situations. Descriptors (singly, or one or more in coordination) will usually adequately represent the ideas and concepts found in a document. To identify specific entities (such as pieces of equipment or famous persons), however, Identifiers must be used (See 8.1.3 and 8.4).

8.1.3 Identifiers - Definition and Function

Identifiers are, in almost all cases, the names of specific entities. As there is a nearly infinite number of specific entities, it is not appropriate to burden a thesaurus with such a multiplicity of entries. Also, Identifiers, being so specific and often transitory, may be represented in the literature very infrequently; this fact also argues for separate treatment.

The major purpose of Identifiers is to provide additional indexing depth, of a specialized nature, supplementing that provided by Descriptors. Identifiers may be specific projects, geographic locations, persons, trade names, tests, legislation, organizations, equipment, etc. It is also possible to use the Identifier category as a testing ground for a term whose permanence may be in some doubt. If the term demonstrates over time its acceptability by the profession, it may graduate from Identifier to Descriptor status, e.g., Computer Assisted Instruction (CAI). Identifiers are not defined (scoped), cross-referenced, structured (related to one another), or otherwise subjected to lexicographic analysis. In order to aid retrieval, however, it is necessary to observe certain standards in their construction and to see that the more frequently used ones appear in the file in a uniform format (See 8.4.3 and Appendix F, Identifier Authority List).

8.1.4 Educational Terminology

Many of the problems encountered in the development of the ERIC Thesaurus directly reflect problems inherent in the relatively undefined language of education and the social sciences. The subject matter of the physical sciences and engineering, in contrast, lends itself much more readily to close definition, and accepted language and word usage.

In most indexing schemes, the basic objective is to break down the language or terminology into its simplest components while still retaining definition. This objective is often reflected in a thesaurus or word-list comprised mostly of single-word terms. In the ERIC Thesaurus, however, there is an abundance of compound (multi-word) terms. This can be explained in terms of the educational process itself. This process basically involves students, teachers, and an educational environment. The events occurring during the educational process can often be applicable equally to any of the three components. In an indexing system which relies on the coordinative use of several terms to represent complex topics, it is difficult to distinguish the source of an action and the recipient of an action without separately defining each. For example, if there is a document dealing with "the effect of the teacher on the attitudes of students", it is theoretically possible to index such a document by coordinating the concepts of "attitudes", "teachers", and "students". In searching, however, how is one to know whether he is retrieving documents that deal with "student attitudes" or "teacher attitudes"? These two concepts can, however, be distinguished by indexing the document in question by the terms "student attitudes" and "teachers". This involves the addition of the term "student" to the term "attitudes" in order to avoid confusion. In an environment as complex as that of the educational process, this type of compounding, binding, or pre-coordination of terms is probably unavoidable.

Beyond the considerations of logic and retrievability however, there is also the question of how people actually think and express themselves in the language of the subject field. For better or worse, much of the language of education consists of compound terminology. In the interests of clarity, unity, and the development of a thesaurus that will be as meaningful and recognizable to users as possible, much of the natural language of the field has been preserved in the ERIC Thesaurus.

8.2 LEXICOGRAPHY

8.2.1 General

The development and maintenance of the Thesaurus of ERIC Descriptors is a decentralized operation. It involves primarily the personnel of the various network components engaged in processing documents for input, e.g., the ERIC Clearinghouses, the CIJE Contractor, the ERIC Facility. (A feedback loop permitting suggestions to be received from user organizations is under development, and is described in Section 8.6 "Vocabulary Improvement Program").

Each Clearinghouse works independently, its personnel specializing in a particular field of education, e.g., linguistics, psychology, sociology, mathematics, foreign languages, handicapped children, career education, reading, etc. Each Clearinghouse lends to the system its own particular subject strengths. Each makes suggestions and recommendations to the system for new terms or changes to old terms. The terminology in each of the many subject fields encompassed by education tends, however, to have a meaning specific to the field. If terms submitted by Clearinghouses were incorporated directly into the Thesaurus, without lexicographic analysis, the results could be inconsistent, ambiguous, and redundant. This is the main problem of a decentralized system and the solution has been a central coordination center (the ERIC Facility Lexicographer) to analyze and control the submissions from the various network components.

8.2.2 Principal Functions

The ERIC Facility Lexicographer reviews all candidate Descriptors submitted by system components (See 8.5 Descriptor Coordination Procedure). All terms, definitions, and cross-reference structures are analyzed and evaluated to see that they:

- Maintain Consistency
- Avoid Proliferation
- Clarify Ambiguities
- Conform to Existing Rules and Guidelines

These functions are important enough to be made concrete via the following examples:

Maintain Consistency

Clearinghouses working independently can generate inconsistent terminology. For example, the concepts "academic" and "scholastic", although varying slightly in meaning, can be considered near synonyms for the purpose of retrieval. The use of both concepts in the Thesaurus would create a problem of inconsistency.

Example: Clearinghouse A submits SCHOLASTIC FAILURE
UF ACADEMIC FAILURE

Clearinghouse B submits ACADEMIC APTITUDE
UF SCHOLASTIC APTITUDE

Clearinghouse C submits ACADEMIC ACHIEVEMENT
UF SCHOLASTIC ACHIEVEMENT

Clearinghouse D submits SCHOLASTIC ABILITY
UF ACADEMIC ABILITY

Problem: Even though the compound terms involved are not all synonyms, if they all went into the Thesaurus as submitted, consistency would obviously be lacking and retrieval would be more difficult. The users would be puzzled by what they would assume to be a distinction made by the system between "academic" and "scholastic". This problem cannot be solved by any one of the Clearinghouses since they are not aware of each other's preferences, e.g., Clearinghouse A does not know that Clearinghouse C prefers to use "academic" rather than "scholastic".

Solution: Central lexicography receives the terms from the A, B, C, and D Clearinghouses. Since all the information has been assembled at one point, the problem can be recognized. The candidate Descriptors are analyzed to see whether they can reasonably coexist in the same system. This analysis may be aided by consulting reference works. It obviously must first be determined whether the terms "academic" and "scholastic" are synonyms or near synonyms and, if so, which is the preferred usage. In this particular case, the conclusion of the research was that the terms are essentially synonymous and that "academic" is more widely used than "scholastic". Once this decision has been made, a precedent is established that will then apply to the compound terms and to later decisions and that in the observance will lend consistency to the terminology selected for the Thesaurus.

Avoid Proliferation

Decentralized input may also lead to a proliferation of redundant and essentially duplicate concepts. These must be avoided in order to: (1) control the size of the Thesaurus, and (2) maintain retrieval effectiveness by storing all synonymous concepts under one main, preferred term.

Example: Clearinghouse A submits INDUSTRIAL ARTS

Clearinghouse B submits INDUSTRIAL CRAFTS

Clearinghouse C submits PRACTICAL SKILLS

Problem: Without central control, all of the terms in the example might well enter the Thesaurus, leading to a total of three terms where one would do. A searcher conducting an inquiry in this topical area would then be burdened unnecessarily with the task of incorporating all three terms into his strategy because any other approach might fail to retrieve essential material.

Solution: With central control the problem can be solved via research, rational decision-making based on facts, and the recording of this process for use in later problem situations. In this case, 'NDUSTRIAL ARTS was selected as the preferred form and cross-references were made to it from the other two synonyms.

Clarify Ambiguity

Experts in one field may be unaware that their terminology may have different meanings in other fields.

Example: Clearinghouse A submits TRAVEL TRAINING.

Clearinghouse A is expert in the field of handicapped children and understands the Descriptor to mean "the process of teaching a visually handicapped person to move freely in his environment." Since Clearinghouse A deals with this concept daily, they see no ambiguity in the term. It is an accepted term in the field of the handicapped. With the "blinders" of the specialist on, Clearinghouse A therefore submits the term as a candidate Descriptor without bothering to prepare a Scope Note.

Problem: If the term enters the Thesaurus without a Scope Note it may present no problem to those working in the handicapped area. Imagine, however, the user interested in vocational education with specific reference to personnel in the field of transportation. This user finds the term TRAVEL TRAINING and reasons its meaning to be some type of training for people in various fields of transportation, e.g., Airline Hostesses, Reservation Clerks, Travel Agency Personnel, etc. He uses the term in a search and is surprised to receive a number of "false drops" dealing with the visually handicapped. This wasted search effort might be repeated in one form or another by hundreds of users.

Solution: At the central lexicographic control point the potential ambiguity can be readily detected because the point of view is larger and not restricted to that of any one Clearinghouse. It is much easier to discern the need for a Scope Note and contact can be made directly with Clearinghouse A requesting that a definition be prepared. The resultant entry in the Thesaurus is non-ambiguous.

Conform to Existing Rules and Guidelines

With the assistance of a number of consultants and specialists in terminology, ERIC has prepared a formal set of Rules for Thesaurus Preparation (Section 8.3.3). These rules cover both the policy and the mechanics of the Descriptor selection and generation process. For example, an important policy is that "Descriptors should represent important concepts found in the literature rather than concepts derived independently." Matters of mechanics covered are, for example: noun forms preferable to verb forms, avoid inverted entries, parenthetical qualifiers permitted, alphabetize letter by letter, etc.

These rules are designed to impose order and internal integrity on the Thesaurus and are to be observed both by the personnel submitting candidate Descriptors and by the central Lexicographer evaluating the submissions.

8.2.3 Generic Structuring

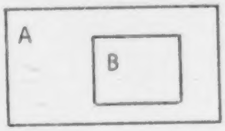
Generic structuring is the most difficult and, at the same time, one of the most important steps in entering a new Descriptor into the Thesaurus. It is the most probable stumbling block for a Clearinghouse considering the submission of a new term and is therefore one of the areas in which the central Lexicographer can offer the greatest assistance.

Generic (or hierarchical) structuring requires detailed explanation in order to be fully understood and this assistance is provided at this point, in the form of a "technical note" on the lexicographic function, so as not to burden unduly the instructions for completing the Descriptor Justification Form (DJF) which appear later (Section 8.5.3).

Broader Term - Narrower Term Relationship

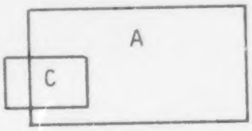
In information systems, Descriptors (or terms) are names (or tags, or addresses) for classes of information, and a NARROWER TERM of a given Descriptor is simply a *subclass* within the scope of that Descriptor, as illustrated below:

Example 1:



If A and B represent terms in the *Thesaurus*, then Term B is a NARROWER TERM to Term A, because all members of the class represented by Term B are also members of the class represented by Term A. The corresponding reciprocal statement is, of course, that Term A is a BROADER TERM to Term B because, while it has members which are not members of Term B, it does include all members of Term B. In Example 2, on the other hand, Term C is *not* a NARROWER TERM to Term A, nor is Term A a BROADER TERM to Term C, because although the terms have members in common, *all* of the members of Term C are *not* also members of Term A.

Example 2:

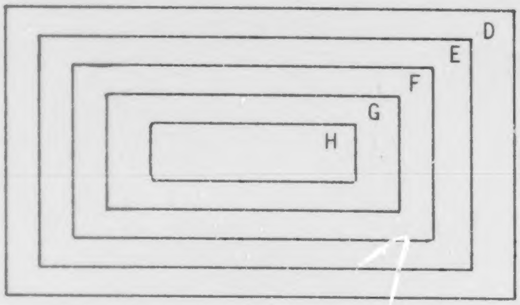


It is an invariable rule that a reference from a given term upward to a BROADER TERM must be reciprocated by a NARROWER TERM reference downward from the BROADER TERM, and vice-versa. In the ERIC system, the reciprocal reference is accomplished automatically by the computer system and must not be manually generated. For example, Term B is entered with BROADER (or NARROWER) TERM A, the computer system finds Term A in the file and adds to the record, NARROWER (or BROADER) TERM B.

Hierarchical Levels and Branches

There can be many levels in a hierarchy, as in the following example:

Example 3:



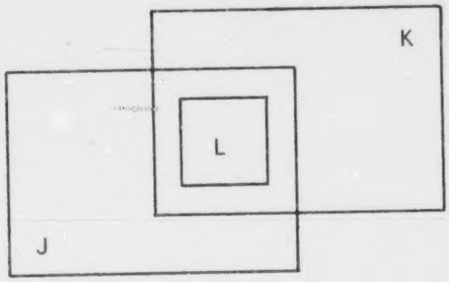
Term F, has BROADER TERM E which, in turn, has a BROADER TERM D. In the other direction, Term F has a NARROWER TERM G, in turn, has a NARROWER TERM H. Obviously, Term D is also a BROADER TERM to F, and Term H is a NARROWER TERM to F. Again, the ERIC computer system makes the task of entering a new term easier by establishing these distant relations automatically. When Term F is entered with BROADER TERM E and NARROWER TERM G, the system will, when it is assembling the hierarchical display, add the additional Terms D and H in the appropriate place(s) in the hierarchy. However, because of this automatic feature, Terms D and H SHOULD NOT have their relationships to TERM F entered manually on the input form, even when they are known, since the computer will then make incorrect double entries, as follows:

Example 4:

```
Term D
.Term E
..Term F
...Term G
....Term H
.Term F
..Term G                 WRONG!
...Term H
..Term H
```

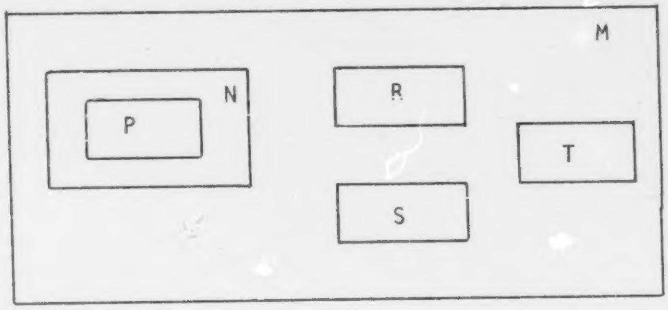
This does not mean that only one BROADER TERM or one NARROWER TERM may be entered on the input form. A given term may very well be a member of two entirely different hierarchies, as in the following:

Example 5:



Terms J and K are both BROADER TERMS to Term L and should be so displayed. Term L (and its narrower terms, if any) will then properly appear in both hierarchies. More frequently, it will be found that a new term being entered will have multiple NARROWER TERMS, as follows:

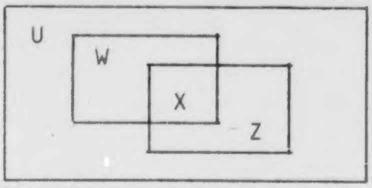
Example 6:



Terms N, R, S, and T are NARROWER TERMS to Term M, and should be so entered on the input form. However, note that Term P SHOULD NOT be entered, since the system will pick it up automatically.

Example 4 notwithstanding, it is possible for a given term to appear legitimately more than once in the same hierarchy. The following is one example of many which could occur.

Example 7:



Term X has BROADER TERMS W and Z, and all are encompassed by Term U. Term X should be entered with BROADER TERM W and BROADER TERM Z, and the hierarchical display would appear as follows:

Example 8

Term U
.Term W
..Term X
.Term Z
..Term X

This is a legitimate double appearance of a term in a single hierarchy, because Terms W and Z have no generic relationship to each other even though they are both BROADER TERMS to Term X and are both NARROWER TERMS to Term U.

Summary

(1) For Term A to be cited as a BROADER TERM to Term B, all members of Term B must also be members of Term A (Example 1).

(2) If Term A is a BROADER TERM to Term B, then Term B is a NARROWER TERM to Term A (mandatory reciprocal relationship).

(3) If any members of Term C are not also members of Term A, then no BROADER TERM/NARROWER TERM relationship exists between A and C (Example 2).

(4) A hierarchy may have many levels, but only the next higher (BROADER TERM) or next lower (NARROWER TERM) level should be cited at time of input in order to avoid incorrect double postings by the computer system (Examples 3 and 4). However, see 6. below.

(5) A term may have, at the next level above or below, more than one BROADER TERM (Example 5), or more than one NARROWER TERM (Example 6).

(6) A term may appear more than once in a given hierarchy PROVIDED there is no direct hierarchical relationship between the referenced BROADER TERMS (Examples 7 and 8).

There are two additional rules, not illustrated in the examples above, which must be followed in determining generic structure:

(7) The part-whole relationship is usually not a broader-narrower relationship; for example, CLASSROOMS as a narrower term to SCHOOL BUILDINGS is incorrect. However, SCHOOL BUILDINGS as a narrower term to BUILDINGS is correct.

(8) Also specifically excluded from the broader-narrower category are relationships based on the possible applications or uses of an entity; for example, the term ATLASES is not considered to be a member of the generic family CLASSROOM MATERIALS because, although ATLASES are sometimes used as CLASSROOM MATERIALS, they have too many other applications to list all as broader terms. The term ATLASES is, however, always a member of the class REFERENCE BOOKS, and the entry of the latter term as a broader term to ATLASES would, therefore, be correct.

8.3 THE THESAURUS OF ERIC DESCRIPTORS

8.3.1 Background

In 1965 an advisory group was formed to consult with the Central ERIC staff on the development of a thesaurus of educational terminology. The advisory group included representatives from various segments of the educational community, as well as information experts. Early meetings also involved observers from various subject matter areas.

With the assistance of the advisory group, thesaurus development proceeded in two phases. There was an initial period of "free indexing" in order to respond to an immediate need to process a collection of documents related to disadvantaged children. Preliminary guidelines to govern the indexers during this period were developed. The free indexing of this document collection provided a nucleus of about 2,300 subject terms related to education. These terms were then submitted to a selected group of educators, librarians, and information specialists for evaluation and changes in word form or cross-reference structure. The work of this phase provided the base from which the ERIC Thesaurus has subsequently expanded.

The second phase involved the development of a set of rules or conventions to govern vocabulary expansion. During this period, the advisory group investigated other thesaurus developmental efforts such as those conducted by the Engineers Joint Council (EJC) and the Department of Defense's Project LEX. The group decided that the rules and conventions appropriate for the physical sciences and engineering were not entirely suitable for the field of education and for the social sciences. As a result, a unique set of rules regarded as appropriate for ERIC began to take shape. In October 1966, the first edition of the Rules for Thesaurus Preparation was published. There have been few changes made in the basic rules since that time. The last edition (OE-12047) is dated September 1969; it added the provision that Descriptors may be members of more than one class and included for the first time material relating to Identifiers.

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*Catalog of Selected Documents on the Disadvantaged - Subject Index (ED-070 485)

The initial advisory group (called the Panel on Educational Terminology) was disbanded in 1972. In late 1973, however, the need for a group to review and pass on the many recommended changes to the Thesaurus that were being received, led to the formation of a large new nationwide body entitled the Vocabulary Review Group (See Section 8.6).

The Thesaurus is currently maintained and corrected by the ERIC Facility, largely on the basis of inputs from the ERIC Clearinghouses. New terms and changes are made on a monthly basis and are sent to all ERIC Clearinghouses and announced in the back of RIE. A quarterly cumulative "Working Copy" is produced by the Facility for the use of the Clearinghouse indexers. The Thesaurus is also periodically (approximately annually) published in hardback form for public sale by Macmillan Information (See Section 1.3).

8.3.2 Divisions of the Thesaurus

To assist the user (searcher or indexer) of the Thesaurus, the terminology is arranged in four different sequences, each providing a different approach. The principal arrangement is a complete alphabetic display of all Descriptors, with the other displays acting, in effect, as indexes.

PRIMARY ARRANGEMENT	SECONDARY ARRANGEMENT
Alphabetic Display	Rotated Display Hierarchical Display Descriptor Group Display

Alphabetic Display

All Descriptors and USE references appear in this display interfiled alphabetically at one location letter-by-letter. Each Descriptor is shown with its complete record: hierarchial structuring, other cross-references, group code, and scope notes; (date of entry into the Thesaurus will be added to the display shortly). All cross-references are reciprocal: for each USE there is a corresponding USED FOR; for each Broader Term there is a Narrower Term; for each Related Term there is a reciprocal Related Term.

Users who wish to determine the status of a certain term should first consult the Alphabetic Display. If a term is found, its meaning or definition can usually be determined by examination of the Broader Terms, Narrower Terms, Related Terms, or other cross-references appearing with it. Whenever necessary, however, a Scope Note is used to supplement the other details of the entry. A Scope Note is provided whenever there might be some doubt about the meaning of a term, and in order to ensure consistency of Descriptor usage. Scope Notes specify the range of subject matter to which a Descriptor is applied, draw necessary distinctions between closely related Descriptors, define obscure or technical terms, and state which one of several possible meanings is correct.

Rotated Display

The Rotated Display sorts all single and multi-word Descriptors, considering each separate word as a filing unit. A Descriptor appears, therefore, in as many locations in this display as it contains separate words. The Rotated Display provides a permuted alphabetic index to all significant words that make up Descriptors in the *Thesaurus* (omitting USE references). Word order within Descriptor is not affected, e.g.:

```
          ABILITY
 ACADEMIC ABILITY
          ABILITY GROUPING
      LOW ABILITY GROUPING
```

This index tends to re-group related terms that may be separated in the alphabetic display due to word position within the descriptor.

Hierarchical Display

The Hierarchical Display presents an alphabetic array of all the "Broadest Terms", i.e., all the terms that carry NT cross-references under them, but no BT cross-references above them. Terms having no BT-NT structure at all are also considered "Broadest Terms". Under each "Broadest Term" the particular generic tree involved is carried to its farthest extreme. Generic subordination (or class membership) is indicated via indentions:

LANGUAGES

. AMERICAN INDIAN LANGUAGES

. . NAVAJO

Terms which are narrower to some other term appear in this display only within that hierarchy, and not by themselves as a separate alphabetic entry.

Descriptor Group Display

Each of the Descriptors in the ERIC Thesaurus has been assigned to one (and only one) of 52 broad categories. The Descriptor Group Display shows each of these categories together with alphabetic arrays of the terms that have been assigned to each. The display is provided for browsing and easy scanning of large numbers of Descriptors that may be of interest within a given area. It is meant to provide suggestions and to be of general assistance to those using the Thesaurus for indexing, searching, and the structuring of new Descriptors. It is not a formal classification scheme.

Each Descriptor Group is defined by a Scope Note and is represented by a three-digit code number. It is the code number that appears in the primary Alphabetic Display to communicate group assignment to the user.

8.3.3 Rules for Thesaurus Preparation

Reproduced below is the second edition, dated September 1969, of the Rules for Thesaurus Preparation (OE-12047). This is a revision of the rules first published in October 1966.

These rules were prepared by the original (but now defunct) Panel on Educational Terminology (PET). The rules outline the requirements that must be met by candidate Descriptors before they can become authorized Descriptors in the Thesaurus. Only those Descriptors actually used for indexing are placed in the Thesaurus.

These rules are adhered to closely in the later instructions for completing the Descriptor Justification Form (Section 8.5.3).

1.0 Rules for Thesaurus Preparation

Introduction

These rules are designed to help the Central ERIC staff and the staffs of the ERIC Clearinghouses make similar decisions related to the addition and modification of terms in the *Thesaurus of ERIC Descriptors*. Although these are not rules for indexing per se, they are invoked when an indexer or his supervisor finds that there is no term in the Thesaurus that is satisfactory for expressing an important concept found in a document. When this occurs, the indexer will record what he considers to be an appropriate term to express the concept. That term then becomes a candidate for inclusion in the Thesaurus. The rules are to be applied both in the selection of candidate terms and in the final decision to include the candidate term as a descriptor in the Thesaurus.

Rules should be regarded as useful in guiding those who ultimately must decide on the details of the Thesaurus. In this sense, a rule is analogous to a law in a "case law" system rather than in a "statutory law" system. Implementation of the rules is thus dependent on the development and analysis of specific cases involving them.

The *Rules for Preparing and Up-dating Engineering Thesauri*, prepared by the Engineers Joint Council, and the *Manual for Building a Technical Thesaurus*, prepared by Project LEX of the Office of Naval Research, have been especially useful in preparing this section.

1.1 Descriptor Elements

1.1.1 *Descriptor Selection*

A descriptor is any single or multiword term which appears in the Thesaurus and which may be used for indexing a document. Rules for selecting descriptors are as follows:

1.1.1.1 Descriptors should represent important concepts found in the literature rather than concepts derived independently. They should also reflect the language used in the literature to describe such concepts.

1.1.1.2 Descriptors selected should have an agreed-upon meaning by relevant user groups and should be acceptable terminology for that user group. Acceptability will involve decisions as to obsolescence, negative connotations, colloquial usage, and other factors. (See also 1.1.3)

1.1.1.3 Since frequency of occurrence of terms is a factor in establishing descriptors, records should be kept of the number of times a candidate term has been used in indexing and/or searching.

1.1.1.4 Multiword descriptors (bound terms, precoordinated terms, and others) should be used whenever single-word descriptors cannot describe a concept adequately or provide effective retrieval. Many problems of this type can be solved by the careful application of rule 1.1.1.1 above. The following points should also be considered:

1.1.1.4.1 Use of a multiword descriptor is justified if any of the individual words in the multiword descriptor can combine so frequently with other descriptors as to produce many false coordinations.

1.1.1.4.2 Use of a multiword descriptor to represent a unique concept is justified if the individual words of that multiword term are also unique descriptors which, when coordinated with each other, represent concepts different from the one intended by the multiword term.

Example: STUDENTS
TEACHERS
STUDENT TEACHERS

1.1.1.4.3 If a single-word term (used as a substantive) is so general as to be virtually useless in searching (e.g., SCHOOLS), consider the use of that term with another term (e.g., SECONDARY SCHOOLS).

1.1.1.4.4 Multiword descriptors, like single-word descriptors, must be carefully considered for placement in descriptor hierarchies.

1.1.1.4.5 Do not use inverted entries. (See section 4.0)

Examples: DEVELOPMENT, EMOTIONAL EDUCATION, ADULT
are not valid descriptors;
EMOTIONAL DEVELOPMENT ADULT EDUCATION
are valid descriptors.

1.1.2 *Cross-References*

1.1.2.1 Use (USE)
The "USE" reference is utilized in two situations:

1.1.2.1.1 To indicate preferred usage
Example: Advanced Education
USE HIGHER EDUCATION

1.1.2.1.2 To cross-reference an abbreviation
Example: ETV
USE EDUCATIONAL TELEVISION

(*Note*: Inverted entries are not to be included in cross-referencing. For example, SCHOOL BUILDINGS would not be cross-referenced with Buildings, School.)

1.1.2.2 Used For (UF)
The mandatory reciprocal of the "USE" reference is the UF reference.

Examples: HIGHER EDUCATION
UF Advanced Education
EDUCATIONAL TELEVISION
UF ETV

1.1.2.3 Broader Term (BT) and Narrower Term (NT)

The broader term (BT) and narrower term (NT) cross references are employed to indicate any class relationships that may exist among descriptors. Where descriptors represent concepts that are included within the class of concepts represented by another descriptor, this relationship is shown by the broader term reference.

Examples: ORAL READING
BT READING
SILENT READING
BT READING

Each broader term reference requires a corresponding reciprocal narrower term reference:

Example: READING
NT ORAL READING
SILENT READING

(*Note*: A given descriptor may be a member of more than one class. If the descriptor is a member of more than one class, reciprocal references must be made to show these relationships to the next given level of the affected classes.)

Example: STUDENT TEACHERS
BT STUDENTS
TEACHERS

1.1.2.4 Related Term (RT)

The related term (RT) cross reference is employed as a guide from a given descriptor to other descriptors that are closely related conceptually but that do not possess class relationships as in 1.1.2.3 above. In general, the RT cross reference is given for the convenience of the user who, in examining one descriptor, needs to be reminded or informed of the existence of a related descriptor. A reciprocal relationship should always be listed.

1.1.3 *Ambiguity*

Parenthetical qualifiers and scope notes should be used when the intended usage of a descriptor has not been made explicit by cross references.

1.1.3.1 Parenthetical Qualifiers

A parenthetical qualifier identifies any particular indexable meaning of a homograph. This meaning is given the status of a descriptor by listing the homograph and its parenthetical qualifier in the thesaurus display. The homograph and its parenthetical qualifier are considered inseparable in indexing or searching. For any given homograph, there may exist as many descriptors consisting of homograph plus parenthetical qualifier as there are unique indexable meanings for that homograph. If a descriptor is judged to be a homograph, it must have a parenthetical qualifier.

Examples: GRADE (INCLINE)
GRADES
(SCHOLASTIC)
POSITION (LOCATION)
POSITION (TITLE)

Do not use another homograph as a parenthetical qualifier.

Example: do not use GRADES
(MARK)
but rather, GRADES
(SCHOLASTIC)

One of the reasons for restricting the use of parenthetical qualifiers to homographs is to preclude the use of inverted entries.

1.1.3.2 Scope Notes (SN)

A scope note is a brief statement appearing in the Thesaurus of the intended usage of a descriptor. It need not provide a formal definition. Scope notes are generally used in two situations:

1.1.3.2.1 To restrict the usage of a descriptor.

Example: OUT OF SCHOOL YOUTH
SN A child of compulsory school age who has been excused from attending school, or a child over 16 years of age who is out of school legally

1.1.3.2.2 To explain the usage of a descriptor which may have different meanings in several areas of education.

Example: ACCELERATION
SN The process of progressing through the school grades at a rate faster than that of the average child

Restricting usage as in 1.1.3.2.1 above will provide a useful retrieval term in instances where a questioner is interested only in experimental studies. A restricted usage might similarly be applied to "review" or "questionnaire study." Restricted usage will also give local ERIC units an opportunity to indicate precisely which additional usages must be provided for in a revised version of the Thesaurus. Explaining usage as in 1.1.3.2.2 above is quite arbitrary at this stage of thesaurus development, but will insure consistent use of a descriptor in indexing or searching.

1.2 Descriptor Construction

1.2.1 *Abbreviations*

In general, abbreviated terms should be avoided as descriptors since they may not be universally understood. Abbreviated and unabbreviated forms, such as acronyms, of a given term must be treated as synonyms and cross referenced. (See rules 1.1.2.1 and 1.1.2.2)

1.2.2 *Special Characters*

Special characters are any nonnumeric, nonalphabetic symbols appearing in the thesaurus display. Special characters are permitted in scope notes within the limits of machine character availability. Right and left parentheses are the only special characters allowable in descriptors. (See rule 1.1.3.1)

1.2.3 *Word Form*

In choosing between singular and plural noun forms, the precedent long established by major indexing and subject cataloging operations will be followed. Generally, a useful rule of thumb may be applied as follows: use the plural form when the proposed term is a "count noun," that is, a noun about which one should ask "how many?" (e.g., devices such as TEACHING MACHINES, PROJECTORS) ; use the singular form for "mass nouns," that is, those about which one should ask "how much?" (e.g., DELINQUENCY) ; use the singular for specific processes, properties, or conditions. Common usage should be followed for term types not covered in the above general rule (e.g., use DEMOCRACY not DEMOCRACIES).

1.2.4 *Numerals*

Numeric elements of descriptors will be displayed as Arabic numerals and will follow the alphabetic element of the descriptor.

Example: GRADE 4
not 4TH GRADE
or FOURTH GRADE

1.2.5 *Descriptor Length*

Descriptors are limited to 50 characters including spaces.

1.3 Descriptor Format

1.3.1 *Alphabetization*

Alphabetize terms letter by letter.

1.3.1.1 Ignore all spaces between words.

1.3.1.2 Alphabetize according to the following sequence:

1.3.1.2.1 Left parenthesis

1.3.1.2.2 Numerals in usual order

1.3.1.2.3 Letters in usual order

1.3.2 *Descriptor Structures*

Typical thesaurus term structures and required format:

Descriptor	ACCELERATION
Scope Note	SN The process of progressing through the school grades at a rate faster than that of the average child
Related Terms	RT ACCELERATED COURSES ACCELERATED PROGRAMS ADVANCED PLACEMENT ADVANCED STUDENTS FLEXIBLE PROGRESSION TIME FACTORS (LEARNING)

Descriptor and parenthetical qualifier	GRADES (SCHOLASTIC)
Used for	UF College Grades (Scholastic) High School Grades (Scholastic)
Narrower Term	NT GRADE POINT AVERAGE
Broader Term	BT ACHIEVEMENT RATING
Related Terms	RT ACADEMIC ACHIEVEMENT CLASS AVERAGE CREDITS GRADING REPORT CARDS SCORING
Use Reference to an acceptable descriptor	College Grades (Scholastic) USE GRADES (SCHOLASTIC) High School Grades (Scholastic) USE GRADES (SCHOLASTIC)

2.0 Descriptor Group Guidelines

Introduction

The Descriptor Group Display aids indexing, searching, and lexicographic analysis of descriptors. It permits browsing, shows descriptor relationships and usage, and helps to structure new descriptors. The Descriptor Group Display is designed as an aid for those using the Thesaurus and not as a classification scheme.

2.1 Descriptor Group Display

The Descriptor Group Display consists of three sections: (1) a list of the 52 Group headings with their respective three-digit codes, (2) a compilation of Descriptor Group Scope Notes which define each Descriptor Group, and (3) the Groups with descriptors. To provide an index or key to the Descriptor Groups, the three-digit group code appears two spaces to the right of each main descriptor in the Descriptor Listing.

Example:

ADMINISTRATOR ATTITUDES 040
UF ADMINISTRATOR OPINION
BT ATTITUDES
RT ADMINISTRATION
ADMINISTRATIVE PERSONNEL
ADMINISTRATOR CHARACTERISTICS
ADMINISTRATOR EVALUATION
EMPLOYERS

ATTITUDES 040

ACADEMIC ASPIRATION
ADMINISTRATOR ATTITUDES
ADMINISTRATOR RESPONSIBILITY
ANTI INTELLECTUALISM

2.2 Assigning New Descriptors to Descriptor Groups

A descriptor is assigned to only *one* Descriptor Group. Each new descriptor is assigned to a Descriptor Group by an indexer. The following guidelines are designed to assist the indexer in assigning descriptors to the proper Descriptor Group:

2.2.1 The assignment of a descriptor to a group should be considered in relation to the entire field of education rather than to a specialty.

2.2.2 Consult the existing Group Display to determine the disposition of similar, parallel, comparable, and analogous concepts.

2.2.3 Consult the Descriptor Group assignments of terms cross-referenced from the new term.

2.2.4 Where terms appear to be logically related to more than one Group, choose the least abstract Group. (For example, READING ABILITY is assigned to READING rather than ABILITIES.)

2.2.5 Consider the word form of the descriptor since it may suggest a choice among Groups. (For example, COSMETOLOGY is assigned to OCCUPATIONS; COSMETOLOGISTS is assigned to PERSONNEL AND GROUPS.)

8.4 IDENTIFIERS

8.4.1 General*

Identifiers are, in almost all cases, the names of specific entities. As there is a nearly infinite number of specific entities, it is not appropriate to burden a thesaurus with such a multiplicity of entries. Also, Identifiers, being so specific and often transitory, may be represented in the literature very infrequently; this fact also argues for separate treatment.

The major purpose of Identifiers is to provide additional indexing depth, of a specialized nature, supplementing that provided by Descriptors. Identifiers may be specific projects, geographic locations, persons, trade names, tests, legislation, organizations, equipment, etc. It is also possible to use the Identifier category as a testing ground for a term whose permanence may be in some doubt. If the term demonstrates over time its acceptability by the profession, it may graduate from Identifier to Descriptor status, e.g., Computer Assisted Instruction (CAI). Identifiers are not defined (scoped), cross-referenced, structured (related to one another), or otherwise subjected to lexicographic analysis. In order to aid retrieval, however, it is necessary to observe certain standards in their construction and to see that the more frequently used ones appear in the file in a uniform format (See 8.4.3 and Appendix F, Identifier Authority List).

8.4.2 Rules for Identifiers

1. Identifiers are not entered into the structured vocabulary of the Thesaurus and are therefore neither structured nor cross-referenced.

2. Parentheses (around qualifiers) e.g., Mercury (Planet) are the only special characters permitted with Identifiers. No periods, commas, hyphens, etc., are permissible. On the resume form, however, asterisks (*) may be used to identify major/published Identifiers, and semicolons should be used between Identifiers (as subfield delimiters).

---

* Repeated from Introduction, Section 8.1.3

3. Identifiers should be written with initial capital letters for all words except prepositions, articles, and conjunctions, which are to be in lower case, and acronyms, which are in all upper case. (Exceptions occur in certain rare cases where the article, preposition, or conjunction is the first word of the Identifier.)

4. A maximum of 50 character spaces (including blanks) is allowed for Identifiers. AVOID the use of over 50 characters because Identifiers will be automatically truncated at the end of 50 spaces (e.g., Carnegie Institute Curriculum Study Center Curriculum in English could be entered as two separate Identifiers: Carnegie Institute Curriculum Study Center; CICSC Curriculum in English). The reasonable removal of prepositions, articles, and conjunction to bring the Identifier within the 50-space limitation is permitted and is preferred over abbreviation. Abbreviation, because of variable practices, can result in many variant term forms scattered throughout the term list and should only be used when other methods of truncation have been exhausted, and then only for the most commonly abbreviated words.

5. The use of organizational names as Identifiers is governed by the following rules:

   a. If an organization is treated in a document from a subject standpoint, it is permissible to enter the organization as an Identifier.

   b. If the organization is solely the preparer, source, or sponsor of the document, and not the subject, it should not be treated as an Identifier (the Institution or Sponsoring Agency fields are the appropriate points of entry).

   c. In some cases where the organization is involved as both the subject of the document and the source of the document, usage of both the Identifier field and the Institution fields may be appropriate.

   d. University and college names, when entered as Identifiers, should be structured as they normally appear and not in the COSATI inverted form designed for large printed indexes by institution, e.g.,

Correct Usage:	University of Wisconsin
Incorrect Usage:	Wisconsin University

6. Identifiers are treated in RIE the same as Descriptors: all Identifiers assigned to a document appear in the Resume section; only those Identifiers that are asterisked as "major" appear in the Subject Index. (At the present time, by convention, only one major Identifier is permitted per resume).

7. Identifiers beginning with numbers are permissible when they represent the official or actual version. It is not possible to insist that numeric Identifiers always be spelled out due to the many variations possible, e.g., 1776 might translate to: one seven seven six, seventeen seventy six, seventeen hundred and seventy six, one thousand seven hundred and seventy six, etc. However, names that have a commonly agreed upon alphabetic translation (or names that appear equally frequently in both numeric and alphabetic forms) may have double entries made, following the pattern of practice established for acronyms, e.g.,

7 Up; Seven Up	Commonly appears both ways
3M Company; Three M Company	Alphabetic translation commonly agreed upon
1984; Nineteen Eighty Four	
2001 a Space Odyssey; Two Thousand One a Space Odyssey	
1234 Modern End Game Studies	No translation advisable

8.4.3 Categories of Identifiers

1. Acronyms - Acronyms are words formed from the initial letter or letters of each of the successive parts of a compound term. Acronyms are entered in all upper case as minor Identifiers, supplementing the written-out version. Exceptions to this rule occur in those special cases where the acronym has replaced the full name form both in common and formal usage, e.g., UNESCO. Consult the Identifier Authority List (8.4.4) whenever in doubt.

EXAMPLES:

Access to Instructional Materials and Services; AIMS
Adaptive Instructional Management System; AIMS
Adult Referral Information Service on Education; ARISE
Creative Application of Technology to Education; CATE
Cultural Language Activity Summer School; CLASS

2. Coined Terminology - Coined words or phrases are created or invented words developed for a specific situation and not broadly recognized or nor accepted.

EXAMPLES: Free Schools
Interglossa
Mitre Grammar
Sesame Street

3. Conferences/Meetings/Seminars/Symposia

EXAMPLES: National Reading Conference

When conferences are also referred to by acronym, double entries may be made as follows:

National Defense Education Act Language Institute;
NDEA Language Institute

4. Course Catalog Listings

EXAMPLE: Auto Mechanics for Women
(not Engineering 2600)

5. Equipment - Hardware and software names and numbers are entered as follows:

EXAMPLES: Autotutor Mark II
Friden Flexowriter
IBM 360
LISP 1 5

6. Ethnic Groups/Tribes

EXAMPLES: Shoshones
Southern Paiutes

NOTE: Indian languages can be found in the Thesaurus.

7. Geographic Locations - Geographic locations are entered when they reflect the subject content of the document, the area where data was gathered, etc.

EXAMPLES:

Alberta
Antarctica
Atlantis
Chicago
Easter Island
Eau Claire County
Europe
Florida
Germany
Gondwanaland
London
Mississippi Delta
Mount Whitney
New York City
Niagara Falls
Nile River
Pacific Ocean
Paris (Texas)
Puget Sound
South America
Southwest Asia
Southwest
Wales
Yakima Valley

In cases where a city is not sufficiently well known to stand by itself, enter both the name of the city and name of the state or country, as two separate identifiers.

EXAMPLES: Memphis; Tennessee
Hollywood; Florida

8. Legislation - Legislation should be entered whenever possible under the "official" name by which the Act may be cited, as contained in the Act itself. Since these official names are often quite long, it may occasionally be necessary to delete non-essential conjunctions and prepositions.

Some Acts become known popularly by their sponsors; these popular names may also be entered, in addition to or in lieu of a more obscure official name.

When legislation is commonly referred to by acronym, a double entry is made, following the rules for acronyms.

EXAMPLES:

Official Name:

Civil Rights Act 1964

Official Name, with Acronym:

Library Services and Construction Act; LSCA

Popular Name:

McAteer Act
Taft Hartley Act

Official Name (Shortened), with Title and Acronym:

Elementary Secondary Education Act Title III;
ESEA Title III

(Shortened from 56 characters:
Elementary and Secondary Education Act of 1965 Title

9. Methods and Theories

EXAMPLES: Adlerian Psychology
Chomsky Competence Model
Logogen System
Montessori Method
Operant Conditioning

10. Personal Names - Individuals used as the subject of a document are entered as follows (no period, use one space between initials):

EXAMPLES: Churchill (Winston S)
Crane (Stephen)
Hemingway (Ernest)
Plutarch
Shakespeare (William)
Skinner (B F)

11. Projects - Projects are entered with the word "Project" leading the entry.

EXAMPLES: Project Anthropology Curriculum
Project ABLE
Project Talent

This practice must be followed both in the case of entities that are not likely to be identifiable as projects if they were to appear without that designation (like the examples above), and in the case of entities that have become very well-known and are commonly referred to in the literature directly by their name.

EXAMPLES: Project Head Start
Project Follow Through
Project Upward Bound

Project names that consist of acronyms derived from the first letters of a larger phrase should appear in all capital letters, e.g., Project TRUE (Teachers and Resources for Urban Education). The spelled-out version of the acronym may be entered, if desired. Project names that are not acronyms should appear in regular upper/lower case, e.g., Project Discovery.

12. Tests and Testing Programs - Tests and testing programs are entered under their formal name; if an acronym is commonly employed, it may also be entered, following the rules for acronyms.

EXAMPLES:

American College Testing Program; ACT
Edwards Personal Preference Schedule; EPPS
Minnesota Multiphasic Personality Inventory; MMPI
School and College Ability Test; SCAT

13. Textbooks - Textbooks and other commercially published books and series are entered as follows:

EXAMPLES:

Gregg Shorthand (Simplified Edition)
Miami Linguistic Readers
Random House Dictionary of the English Language
Scott Foresman Basal Readers
Uralic and Altaic Series

14. Trade Names - Trade names, brand names, or other proprietary designators are entered as follows:

EXAMPLES:

Cuisenaire Rods
Donald Duck
Kellogg Product 19
Kodak
MATCH Boxes
Reading in High Gear
Smokey the Bear
System for Success
Snellen Chart

15. Organizations (See Section 8.4.2, Rule 5.d)

a. Community Organizations

EXAMPLES: Cleveland Institute of Art
Los Angeles Chamber of Commerce

b. Educational Organizations

EXAMPLES: College of the Pacific
Iowa State University
University of Pittsburgh

When an educational organization is well-known by an acronym, a double entry may be advisable, following the rules for acronyms.

EXAMPLES: National Educational Association; NEA
Parent Teacher Association; PTA

c. Foundations

EXAMPLES: Ford Foundation
Kaiser Foundation
Shell Companies Foundation

d. Government Agencies

EXAMPLES:

California Department of Labor
Department of Health Education and Welfare
National Institute of Education; NIE
Office of Management and Budget

e. Industrial Organizations

EXAMPLES:

Ford Motor Company
International Business Machines Corporation; IBM
Operations Research Incorporated
RAND Corporation

f. Professional Organizations

EXAMPLES:

American Association of Junior Colleges; AAJC
American Association of School Administrators; AASA
American Psychological Association; APA
Association for Computing Machinery; ACM
Modern Language Association; MLA

g. School Districts

EXAMPLES:

Long Beach California Unified School District
Polk County Florida Schools
Tangipahoa Parish Louisiana School System

For school districts designated by number, convert the numbers to the proper geographic location, as follows:

EXAMPLE: Milford Kansas School District
(for Kansas School District #229)

8.4.4 Identifier Authority List

Even with the full cognizance and use of the preceding guidelines and examples, problems will sometimes arise in the establishment of new Identifiers. Indexers faced with such problems may take these additional courses of action: (1) Consult the large list of most commonly used Identifiers (Appendix F), which is, in effect, a list of agreed-upon versions or an authority list for the most heavily posted terms; (2) Consult the Descriptor and Identifier Usage Report, (3) Consult certain authoritative reference works. Indexers should keep in mind, however, that the original purpose of the Identifier field was to provide them with a relatively free and unconstrained field in which to place virtually any kind of non-conventional access point that would be useful to searchers. Identifiers were never meant to be rigidly controlled and, indeed, they may ofted be more valuable to searchers if they follow the usage of the contemporary literature in hand rather than if they are forced into previously agreed-upon molds.

Commonly Used Identifiers (Examples)

The following is a list of some commonly used identifiers, in their preferred form.

Identifier	Class of Identifier	Acronym To be Used As Additional Minor Identifiers
1. 4 H Clubs	Organization	
2. Economic Opportunity Act	Legislation	
3. Educational Resources Information Center	Organization	ERIC
4. Elementary Secondary Education Act	Legislation	ESEA
5. Elementary Secondary Education Act Title III	Legislation	ESEA Title III
6. Higher Education Act	Legislation	
7. Individually Prescribed Instruction	Method/Theory	IPI
8. Job Corps	Organization	
9. Manpower Development and Training Act	Legislation	MDTA
10. Mobilization for Youth	Program	MFY
11. Modern Language Association	Organization	MLA
12. National Aeronautics and Space Administration	Organization	NASA
13. National Defense Education Act	Legislation	NDEA
14. National Education Association	Organization	NEA
15. National Institute of Education	Organization	NIE

	Identifier	Class of Identifier	Acronym To be Used As Additional Minor Identifiers
16.	National Science Foundation	Organization	NSF
17.	New Grammar	Coined Terminology	
18.	Office of Economic Opportunity	Organization	OEO
19.	Peabody Picture Vocabulary Test	Test	PPVT
20.	Peace Corps	Organization	
21.	Physical Science Study Committee	Organization	
22.	Piaget (Jean)	Personal Name	
23.	Planning Programming Budgeting System	Method/Theory	PPBS
24.	Program Evaluation and Review Technique	Method/Theory	PERT
25.	Project ABLE	Project	ABLE
26.	Project Follow Through	Project	
27.	Project Head Start	Project	
28.	Project Talent	Project	
29.	Project Upward Bound	Project	
30.	Projects to Advance Creativity in Education	Program	PACE
31.	Putting Research into Educational Practice	Program	PREP
32.	Scholastic Aptitude Test	Test	SAT
33.	Selective Dissemination of Information	Method/Theory	SDI
34.	Sesame Street	Coined Terminology	
35.	Shakespeare (William)	Personal Name	
36.	Skinner (B F)	Personal Name	
37.	Social Science Education Consortium	Organization	
38.	South Africa	Geographic Location	
39.	Southwest	Geographic Location	
40.	Stanford Achievement Test	Test	
41.	Stanford Achievement Test Reading	Test	
42.	Stanford Binet Intelligence Scale	Test	
43.	Teacher Corps	Organization	
44.	UNESCO	Organization	
45.	United States	Geographic Location	
46.	University of California	Organization	
47.	University of California Berkeley	Organization	
48.	W K Kellogg Foundation	Organization	
49.	Washington Precollege Test	Test	
50.	Young Mens Christian Association	Organization	YMCA

References Useful in Establishing Identifiers (Examples)

The following references are examples of useful authorities in preparing Identifiers for input to the ERIC system.

1. For Geographic Locations:

   The Columbia Lippincott Gazetteer of the World. New York, Columbia University Press, 1961. 2170 p.

   Rand McNally - The International Atlas. Chicago, Rand McNally, 1969. 503p.

2. For Tests and Measurement:

   Buros, Oscar K., ed. Tests in Print: A comprehensive bibliography of tests for use in education, psychology, and industry. New Jersey, Gryphon, 1961.

   Buros, Oscar K., ed. Mental measurements yearbook. 6th ed. New Jersey, Gryphon, 1965.

3. For Government Departments:

   United States Government Organization Manual. Revised annually. Available from the Superintendent of Documents, Government Printing Office, Washington, D. C. 20402.

4. For Educational Organizations:

   American Universities and Colleges. Washington, D. C., American Council on Education, 1968, 1782p.

   American Junior Colleges. Washington, D. C. American Council on Education, 1967. 957p.

   Education Directory. Revised periodically. Available from the Superintendent of Documents, Government Printing Office. Washington, D. C. 20402. Covers state governments, public school systems, higher education, education associations.

8.5 DESCRIPTOR COORDINATION PROCEDURE

During the course of indexing, indexers become aware of concepts, in the documents being processed, which they cannot find adequately represented in the existing Thesaurus. Any new concept which is not covered by the Thesaurus should be appraised and considered for addition to it. A concept appraised positively must then be structured as a term with cross-references, perhaps a scope note, and a justification, in order to be submitted as a candidate Descriptor. Candidate Descriptors should receive the benefit of the best subject specialist expertise and analysis that the Clearinghouse (or other contractor) organization can bring to bear. This careful consideration should be further aided and abetted by reliance on authoritative dictionaries, encyclopedias, handbooks, and other reference materials. Throughout the Descriptor appraisal and generation process the Lexicographer at the ERIC Facility may be consulted for advice and should be considered a resource on which to draw if necessary. The decentralized nature of the ERIC system, with its subject specialists located at remote points relative to each other and to the central computer processing/file maintenance activity, necessitate an explicit procedure to achieve timely coordination for new Descriptors submitted as candidates for the Thesaurus. The mechanism for submitting new Descriptors as candidates for the Thesaurus is the Descriptor Justification Form (DJF) (See Section 8.5.3).

8.5.1 Appraisal of Potential New Descriptors

The following guidelines are provided to aid subject specialists in determining the need for new Descriptors.

1. Is it a Synonym?

   The subject analyst should always consider that he may be dealing with new synonyms. To prevent scattering of similar information, and to obviate multiple searches, it is both practical and desirable to consider terms having certain special relationships to be synonyms for indexing and retrieval purposes, that is, quasi-synonyms. Terms that represent different viewpoints of the same property continuum may be considered quasi-synonyms; for example, SMOOTHNESS and ROUGHNESS. The preferred term should be entered as a Descriptor, the other as a USE reference. Terms representing concepts that overlap significantly may be treated as quasi-synonyms; for example, LIGHTING and ILLUMINATION; DURATION and TIME; GENETICS and HEREDITY. The preferred term should be indicated by a USE reference. Avoid the selection of Descriptors whose meanings coincide so closely with those of established Descriptors that indexers (and searchers) will have difficulty in distinguishing between them.

2. Is it an Identifier?

The subject analyst should consider that the concept being analyzed may be an Identifier. This determination can be assisted by considering the various Identifier categories, e.g., Acronyms, Coined Terminology, Organizations, Geographic Locations, Tests & Testing Programs, Trade Names, Textbooks, Equipment, Legislation, etc. (See Section 8.4.3). Identifiers are allowable index terms, and a special field on the Resume form has been provided for their inclusion. Unlike Descriptors, however, Identifiers are neither cross-referenced nor structured, and they do not appear in the Thesaurus. Their major purpose is to provide index terms of a specialized nature in addition to the Descriptors in the Thesaurus.

3. Is it Useful?

Potential new Descriptors should be appraised on the basis of their estimated usefulness in communication, indexing, and retrieval. In general, utility of terms can be estimated by considering: the relative frequency of occurrence in the literature; the relative frequency of use within an information system; proximity in meaning to Descriptors that have been selected previously; technical precision and acceptability in the field; transiency, stability, "staying power". These factors are interdependent and must often be considered together.

4. Does it Actually Appear in Documents Being Indexed?

To be considered for the ERIC Thesaurus, a concept must, under present rules and constraints, actually be used in a document or documents being indexed. It cannot, for example, merely be a missing link in the hierarchical chain. For example, assume that the Thesaurus contained GLASS WALLS as a Narrower Term directly to ARCHITECTURAL ELEMENTS, skipping the intermediate term WALLS; nevertheless, the term WALLS could only be added if documents dealing with it actually came through. WALLS could not be added merely to complete the hierarchy.

8.5.2 Generation of Candidate Descriptor Recommendation

If the concept found in the literature is not included among the Descriptors presently contained in the Thesaurus, if it is not an Identifier, and if synonymity has been ruled out, then the concept should be "translated" into a candidate Descriptor. The following major points should be kept in mind during this process.

1. Ambiguity

   Ambiguity in terminology, created by such factors as synonyms, homographs, differences in spelling, word forms, and hierarchical treatment, is a barrier to effective communication. The subject specialist should make the avoidance of ambiguity a first consideration.

2. Specialization

   Each area of educational technology usually develops its own specialized vocabulary or jargon to express the concepts peculiar to its own interests. Analysis of these specialized vocabularies reveals that many or most of the terms thought perhaps to be unique by a particular speciality are actually identical with or closely related to terms used in other areas of technology. Moreover, it is quite common for technologists in one area to borrow terms from another and use them for their own purposes. As an example, the term "Transformation Theory" is used in both the fields of linguistics and mathematics to refer to highly different concepts. Subject specialists must be continuously aware of the fact that a candidate Descriptor within their field of interest may have another meaning in other fields. The acceptability of a term can be researched by consulting references and authorities such as thesauri, dictionaries, encyclopedias, handbooks, etc. Slang, jargon, coined terms, and other depreciated terminology, should be excluded.

3. Appearance in Other Thesauri

   If the candidate Descriptor is included in reputable existing thesauri such as the Thesaurus of Engineering and Scientific Terms (LEX Thesaurus), as a main (postable) term and not a USE reference or an "Array" term ("use of a more specific term is recommended;

consult the terms listed below"), then the chances are that the concept is an acceptable one. Nevertheless, it must be carefully ascertained that the structure, Group Code, parenthetical qualifier, and Scope Note for the term being used as a precedent, do not conflict with the intended use within ERIC. Definitions are required for all candidate terms, even those found in other thesauri.

4. Rules

The subject specialist or indexer generating a candidate Descriptor should be thoroughly familiar with the Rules for Thesaurus Preparation (Section 8.3.3). These rules contain detailed information relating to maximum Descriptor length, multiword Descriptors, special characters, parenthetical qualifiers, etc. These rules should be applied equally by both the generator of the candidate Descriptor and the Lexicographer acting on the recommendation.

8.5.3 Descriptor Justification Form (DJF)

The ERIC Descriptor Justification and Data Input Form (Figure 8-1) is provided for use in either entering a new candidate Descriptor or modifying scope notes and cross-references for an existing Descriptor. This section discusses the characteristics of the form and general requirements for completion.

LINE SPACING

The form is designed for use with any standard typewriter and all lines requiring data entry are spaced at six to the inch, so that when the form is lined up for entry of the Main Term, it should not be necessary to adjust the typewriter subsequently.

CHARACTER LIMITATIONS

In blocks 1 and 4 through 7, the only acceptable characters are:

(1) Upper case (Capital) alphabetics A through Z
(2) Numerics 0 through 9
(3) Left and right parentheses (and)

In block 2, use numerics only (three-character Group Code).

In block 3, Scope Note, use any valid ERIC System character (See Figure 5-2) EXCEPT THE SEMI-COLON. However a period cannot be the last character in this field and lower case alphabetics should not be used.

FIELD LENGTH

Descriptors

An ERIC Descriptor cannot exceed 50 characters (including spaces) in length*. Therefore, in Blocks 1 and 4 through 7, the distance between the end of the underline following the keyword and the end of the block is sufficient to permit the entry of 50 characters and spaces with a PICA (10 characters per inch) typewriter.

However, since ELITE (12 characters per inch) typewriters are more prevalent than PICA typewriters, a vertical mark is provided on each line to mark the 50-character point for these machines.

If a Descriptor entry contains more than 50 characters and extends past the end of the block (PICA typewriters) or the vertical mark (ELITE typewriters), it is invalid and not acceptable to the system.

Although there is no system limit to the number of Broader Terms, Narrower Terms, Used For, and Related Terms which may be entered, practical considerations limit the number of lines which can be provided on the form. If more space is required for any of these, the use of additional sheet(s) is permitted. If additional sheets are required, the first sheet should be marked:

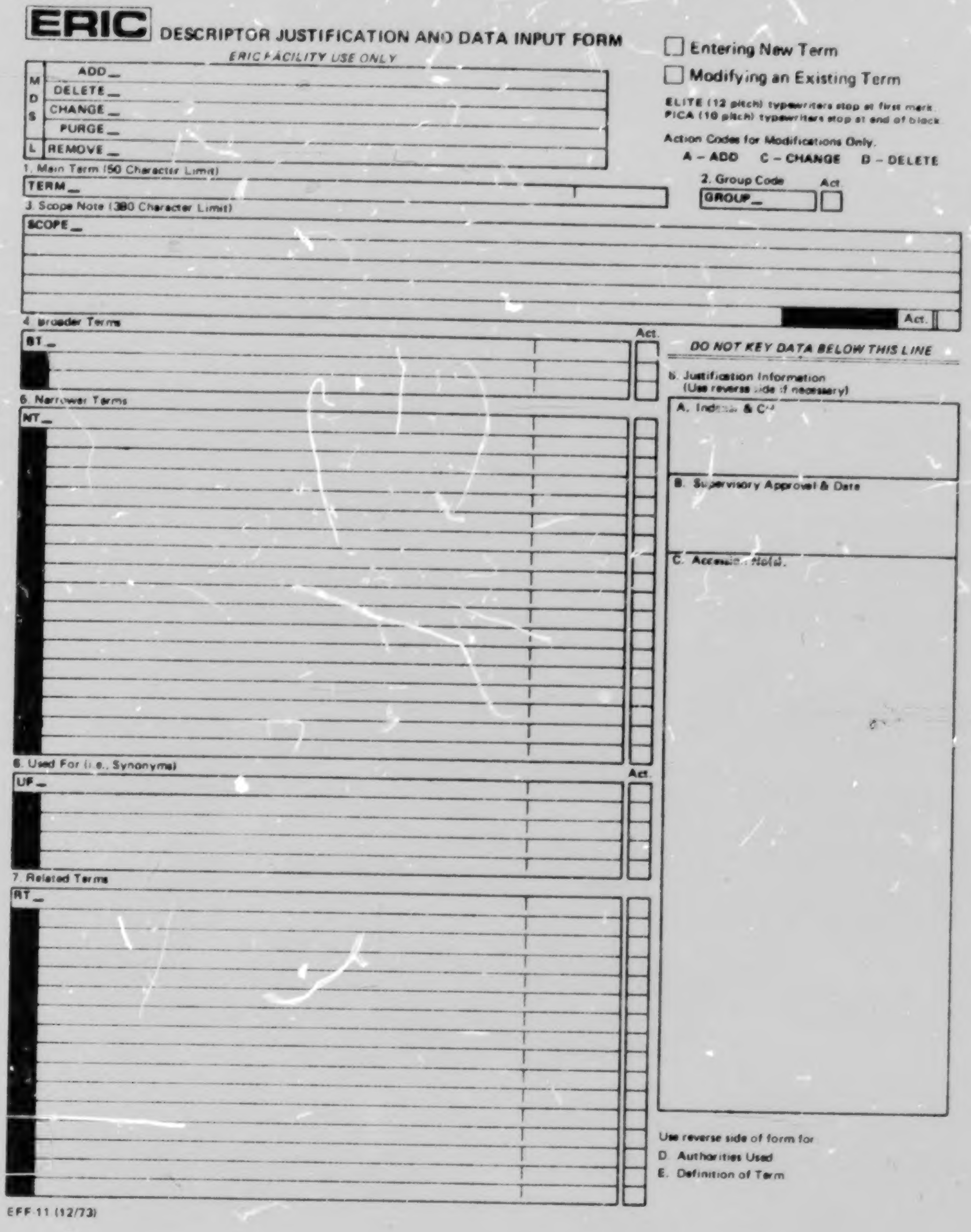
Sheet 1 of X

and the following sheets should be marked:

Sheet 2 of X

---

*formerly 34 characters



ERIC DESCRIPTOR JUSTIFICATION AND DATA INPUT FORM

☐ Entering New Term

☐ Modifying an Existing Term

ELITE (12 pitch) typewriters stop at first mark.
PICA (10 pitch) typewriters stop at end of block.

Action Codes for Modifications Only.
A – ADD C – CHANGE D – DELETE

ERIC FACILITY USE ONLY

M	ADD _
D	DELETE _
S	CHANGE _
	PURGE _
L	REMOVE _

1. Main Term (50 Character Limit)
TERM _

2. Group Code Act.
GROUP _ ☐

3. Scope Note (380 Character Limit)
SCOPE _

Act. ☐

4. Broader Terms
BT _

Act.

DO NOT KEY DATA BELOW THIS LINE

8. Justification Information
(Use reverse side if necessary)

A. Indexer & CH

B. Supervisory Approval & Date

C. Accession No(s).

5. Narrower Terms
NT _

6. Used For (i.e., Synonyms)
UF _

Act.

7. Related Terms
RT _

Use reverse side of form for
D. Authorities Used
E. Definition of Term

EFF-11 (12/73)

FIGURE 8-1
ERIC DESCRIPTOR JUSTIFICATION FORM

ERIC DESCRIPTOR JUSTIFICATION AND DATA INPUT FORM

D. Authorities Used
E. Definition of Term

EFF-11A (12/73)

FIGURE 8-1
Sheet 2

In addition, on the last line of each block which is continued on the following sheet(s), the entry "(CONTINUED)" should be entered at the extreme right end of the line, as in the following example:

6. Used For (i.e., Synonyms)

		Act.	
UF–	ACADEMIC PROGRESS	☐	
	ACADEMIC SUCCESS	☐	FIRST SHEET
	EDUCATIONAL ACHIEVEMENT	☐	
	EDUCATIONAL ATTAINMENT	☐	
	(CONTINUED)	☐	

6. Used For (i.e., Synonyms)

		Act.	
UF–	EDUCATIONAL LEVEL	☐	
	SCHOLASTIC ACHIEVEMENT	☐	
	SCHOOL ACHIEVEMENT	☐	FOLLOWING SHEET
	STUDENT ACHIEVEMENT	☐	
		☐	

Group Code

Three (3) numeric characters only.

Scope Note

The Scope Note field is limited to 380 characters, including spaces, so the form has been designed to provide for that number of PICA (10 per inch) characters between the end of the underline following the keyword and the beginning of the shading on the fifth line. For ELITE (12 per inch) typewriters, there are 378 spaces between the underline and the end of the fourth line.

However, since HYPHENATION IS NOT PERMITTED AT THE END OF A LINE, it is unlikely that all of these spaces can be used. Therefore, it is permissible to continue for a few characters into the shaded area (PICA typewriters) or enter a short word on the fifth line (ELITE typewriters) PROVIDED that there is sufficient wasted space on previous lines so that the 380 character limit is not exceeded! In determining whether or not there are enough unused positions, remember that the computer system inserts a space after the last word in each line, so that if there are seven (7) character spaces unused on a line, only six (6) are available for carryover use.

SUBMITTING A NEW TERM

Candidate Descriptors should conform, in both intellectual content and format, to the Rules for Thesaurus Preparation (Section 8.3.3).

The first step in preparing a DJF to enter a new Descriptor is to enter an "X" in the "Entering New Term" block at the top of the page, as shown:

☒ Entering New Term

This alerts the Facility Lexicographer to the purpose of the submittal.

1. Main Term

   The candidate Descriptor is entered in Block 1, as follows:

1. Main Term (50 Character Limit)

TERM_ COUNSELORS

   Avoid the use of conjunctions, where possible.

2. Group Code

   Each candidate Descriptor must be assigned a Group Code by the indexer submitting it. Group Codes should be assigned in accordance with the following rules:

a. Only one Group Code can be assigned to a descriptor.

b. Group assignments should be made on the basis of the Descriptor's relationship to the entire field of education, rather than a particular Clearinghouse's subject specialty.

c. Consult the Descriptor Group display to determine:

   (1) The assignment of similar, parallel, comparable, or analogous concepts.

   (2) The assignment of terms which will be cross-referenced from the candidate Descriptor.

d. Where terms appear to be logically related to more than one Group, choose the more specific Group. For example, READING ABILITY is assigned to READING rather than to ABILITIES.

e. Consider the word form of the Descriptor, since it may suggest a choice among Groups. For example, COSMETOLOGY is assigned to OCCUPATIONS, while COSMETOLOGISTS is assigned to PERSONNEL AND GROUPS.

The three digit Group Code is entered in Block 2, as follows:

2. Group Code Act.
GROUP_ 380 ☐

The Action (Act.) block is left blank in all fields when entering a new term.

3. Scope Note

Scope Notes, when required, should be written in accordance with the Rules for Thesaurus Preparation (Rule 1.1.3.2), and the following:

Keep the length of the Scope Note to a minimum consistent with clarity. Maximum length is 380 characters.

Avoid unnecessary transitional words and phrases (such as: "used for"; "the following"; and "as an example") which do not contribute to meaning.

While the system will accept lower case alphabetic characters, Scope Notes should be entered in all upper case to maintain consistency with existing entries and to conform to limitations of certain output devices.

Enter Scope Note in Block 3, as follows:

1. Main Term (50 Character Limit)
TERM_ OUT OF SCHOOL YOUTH

2. Group Code Act.
GROUP_ 380 ☐

3. Scope Note (380 Character Limit)
SCOPE_ A CHILD OF COMPULSORY SCHOOL AGE WHO HAS BEEN EXCUSED FROM ATTENDING SCHOOL, OR A CHILD OVER 16 YEARS OF AGE WHO IS OUT OF SCHOOL LEGALLY

Act. ☐

1. Main Term (50 Character Limit)
TERM_ ACCELERATION

2. Group Code Act.
GROUP_ 310 ☐

3. Scope Note (380 Character Limit)
SCOPE_ THE PROCESS OF PROGRESSING THROUGH THE SCHOOL GRADES AT A RATE FASTER THAN THAT OF THE AVERAGE CHILD

Act. ☐

1. Main Term (50 Character Limit)
TERM_ LITERARY GENRES

2. Group Code Act.
GROUP_ 260 ☐

3. Scope Note (380 Character Limit)
SCOPE_ DIVISIONS OF LITERATURE INTO CATEGORIES OR CLASSES WHICH GROUP WORKS BY FORM OR TYPE, SUCH AS BIOGRAPHIES, DRAMA, ESSAYS, FICTION, OR POETRY, RATHER THAN BY MOVEMENTS SUCH AS NATURALISM, REALISM, ROMANTICISM, OR BY SUBJECT MATTER AS IN LEGENDS, MYTHS, ETC.

Act. ☐

4. Broader Terms

Section 8.2.3, "Generic Structuring", should be consulted whenever constructing hierarchies via the entry of Broader or Narrower terms.

1. Main Term (50 Character Limit)

TERM_ LITERARY GENRES

4. Broader Terms	Act.
BT_ LITERATURE	☐
▨	☐
▨	☐

1. Main Term (50 Character Limit)

TERM_ LANGUAGE INSTRUCTION

4. Broader Terms	Act.
BT_ HUMANITIES INSTRUCTION	☐
▨	☐
▨	☐

Note that both of the referenced Broader Terms have themselves Broader Terms, HUMANITIES and INSTRUCTION, respectively. which are, of course broader than the respective Main Terms, but they are NOT entered on the DJF. Only the immediate next higher level should be entered.

However:

1. Main Term (50 Character Limit)

TERM_ ELEMENTARY SCHOOL COUNSELORS

4. Broader Terms	Act.
BT_ COUNSELORS	☐
▨ PUPIL PERSONNEL WORKERS	☐
▨	☐

In this case, ELEMENTARY SCHOOL COUNSELORS are properly both COUNSELORS and PUPIL PERSONNEL WORKERS, and, since there is no direct hierarchical relationship between the latter two, both should be entered, even though both terms are in the overall hierarchy PERSONNEL.

5 Narrower Terms

Narrower Terms should be entered in Block 5, as follows:

1. Main Term (50 Character Limit)

TERM— MATHEMATICS

5. Narrower Terms

		Act.
NT—	ALGEBRA	☐
	ARITHMETIC	☐
	CALCULUS	☐
	GEOMETRY	☐
	MODERN MATHEMATICS	☐
	STATISTICS	☐
	TRIGONOMETRY	☐
		☐

There is no limit to the number of Narrower Terms which may be referenced, but all must be at the next lower level only. The terms ADDITION, DIVISION, etc., which are narrower to ARITHMETIC are NOT entered.

Particular care must be taken, when inserting a new term into the midst of an existing hiararchical string, to remove existing generic references in order to avoid invalid double references. Refer to that part of this section entitled "Modifying an Existing Term - Generic Structure Changes", for an explanation of how to deal with this problem.

6. Synonyms (Used For)

When a single concept can be represented by more than one term, one of these (usually the most common usage) should be selected as the Main Term, and the synonyms (or near synonyms) should be entered in Block 6, as follows:

1. Main Term (50 Character Limit)

TERM— HEALTH PERSONNEL

6. Used For (i.e., Synonyms)

	Act.
UF— HEALTH MANPOWER	
HEALTH OCCUPATIONS PERSONNEL	
HEALTH SERVICE PERSONNEL	
HEALTH SERVICE WORKERS	
HEALTH WORKERS	

This field should also be used when the selected term has Narrower Terms which do not warrant establishment as Descriptors, for example:

1. Main Term (50 Character Limit)

TERM— GRADES (SCHOLASTIC)

6. Used For (i.e., Synonyms)

	Act.
UF— COLLEGE GRADES (SCHOLASTIC)	
HIGH SCHOOL GRADES (SCHOLASTIC)	

Combinations of both applications are, of course, possible as in the following:

1. Main Term (50 Character Limit)

TERM— GROUNDS KEEPERS

6. Used For (i.e., Synonyms)

	Act.
UF— ASSISTANT GROUNDS KEEPERS	
GARDENERS	
GROUNDS CARETAKERS	
SPORTS GROUNDS KEEPERS	
YARD LABORERS	

If there is a common abbreviation or acronym for the term, it should be entered in this field, for example:

1. Main Term (50 Character Limit)

TERM_ ELECTROENCEPHALOGRAPHY

6. Used For (i.e., Synonyms)

	Act.
UF_ EEG	

7. Related Terms

The Related Term reference is employed as a guide from a given Descriptor to other Descriptors that are closely related conceptually, but NOT hierarchically (See Rules for Thesaurus Preparation, Rule 1.1.2.4). Generally, two Descriptors are cross-referenced as Related Terms if it is believed that the user interested in documents indexed by one, may also find relevant documents indexed by the other. However, to avoid unnecessary proliferation of terms (which will increase the size of the Thesaurus and reduce its usability), care should be exercised in entering Related Term references. Only relatively close relationships need be cross-referenced. One way to reduce the number of references is to select the proper hierarchical level of the reference, as follows:

1. Main Term (50 Character Limit)

TERM_ DEGREE REQUIREMENTS

PREFERRED

7. Related Terms

	Act.
RT_ DEGREES	

1. Main Term (50 Character Limit)

TERM— DEGREE REQUIREMENTS

NOT
PREFERRED

7. Related Terms

			Act.
RT—	ASSOCIATE DEGREES		☐
	BACHELORS DEGREES		☐
	DOCTORAL DEGREES		☐
	MASTERS DEGREES		☐
			☐

Related Terms are entered in Block 7 in accordance with the examples which follow.

Related Term references may be used to identify Descriptors with the following properties:

a. Closely Related in Meaning:

Related Terms will usually come from different hierarchical structures. They may on occasion come from the same hierarchy, however, Descriptors immediately broader than or narrower to the term in question are excluded from being Related Terms.

1. Main Term (50 Character Limit)

TERM— HOSPITAL PERSONNEL

7. Related Terms

			Act.
RT—	NURSES		☐
	PHYSICIANS		☐
			☐
			☐

b. Near Synonyms

No USED FOR references may be used. Only existing Main Terms, or Main Terms being submitted simultaneously, may be entered.

1. Main Term (50 Character Limit)

TERM– HEALTH PERSONNEL

7. Related Terms

	Act.
RT– HEALTH OCCUPATIONS	
HEALTH SERVICES	

c. Near Antonyms

1. Main Term (50 Character Limit)

TERM– ACADEMIC ACHIEVEMENT

7. Related Terms

	Act.
RT– ACADEMIC FAILURE	

d. Having the Same Broader Term

Descriptors which are also Narrower Terms to a Broader Term of the Descriptor in question may be cited as related terms to that same Descriptor.

1. Main Term (50 Character Limit)

TERM– INSECTICIDES

7. Related Terms

	Act.
RT– HERBICIDES	
RODENTICIDES	

These terms are all narrower to the common Broader Term PESTICIDES. However, care should be taken not to overdo such references. For example, the term HEALTH PERSONNEL should not be referenced to AIRCRAFT PILOTS, ENGINEERS, LANDLORDS, MILITARY PERSONNEL, etc., simply because they are also narrower terms to PERSONNEL. Selectivity must be exercised.

e. Related in Usage or Application

Descriptors which have viewpoint relationships, such as a relationship based on usage, may be cited as Related Terms.

1. Main Term (50 Character Limit)

TERM— EDUCATIONAL TELEVISION

7. Related Terms	Act.
RT— TELECOURSES	
TELEVISED INSTRUCTION	

f. Part-Whole Relationship

Descriptors representing concepts bearing a part-whole relationship to each other may be cited as Related Terms.

1. Main Term (50 Character Limit)

TERM— EDUCATIONAL EQUIPMENT

7. Related Terms	Act.
RT— EDUCATIONAL FACILITIES	
EDUCATIONAL RESOURCES	

8. Information Block

The Information Block should be completed as follows:

a. Indexer and Clearinghouse

Enter the name of the indexer and his Clearinghouse. The Clearinghouse abbreviation or prefix is sufficient.

A. Indexer & CH

John R. Doe, TM

b. Supervisory Approval and Date

All DJF's must be examined by and have the signature of the approving supervisor.

B. Supervisory Approval & Date

William K. Brooks 5/4/74

c. Accession Numbers

Enter the Clearinghouse Accession Numbers of all documents indexed by the term being submitted.

C. Accession No(s).

TM 000 367; TM 000 415

d. Authorities Used

Authorities must always be cited to support definitions, even if the only citation is the document itself. Descriptors "should have an agreed-upon meaning by relevant user groups and should be acceptable terminology for that user group." (See Rules for Thesaurus Preparation, Rule 1.1.1.1). Unpublished authorities cannot be regarded as acceptable.

For a bibliography of frequently cited references in the field of Education, see the most recent edition of the Thesaurus of ERIC Descriptors (Macmillan Information Corporation).

ERIC DESCRIPTOR JUSTIFICATION AND DATA INPUT FORM

D. Authorities Used

Cumulated Subject Index to Psychological Abstracts 1927-1960, page 101.
Clive, Victor B., And Others, Use of Bibliographical Information on Students Who Do and Do Not Achieve in High School Science Courses, ED 003 043, page 9.

e. Definition of Term

The definition selected must be applicable to the concept described. Definitions must be complete, and should not be "slanted" to suit a particular requirement. The restriction of a general term to a usage more specialized than is generally recognized should be avoided. If there is no more suitable term, consider the use of a parenthetical qualifier.

If the definition of a multi-word term is "assembled" from the definitions of the individual words in the term, the authority and page number of each element must be associated with that element to enable the Lexicographer to follow the reasoning.

Definitions are required for all candidate Descriptors, including those found in other thesauri.

E. Definition of Term

BIOGRAPHICAL INVENTORIES: collections of questions relating to the incidents, feelings, opinions, interests, and attitudes that an individual has experienced.

MODIFYING AN EXISTING TERM

After a Descriptor has been entered into the system, it may be necessary to modify its structure to correct errors or omissions or to reflect subsequent changes in the vocabulary or its application. Modifications to existing terms may be made by submitting a DJF with the "Modifying an Existing Term" block marked as follows:

☒ Modifying an Existing Term

While system requirements may require the Lexicographer at the ERIC Facility to prepare several DJF's to actually accomplish a given set of changes to a term's structure, Clearinghouses can usually indicate the desired changes on a single DJF in accordance with the following:

1. Action Codes

   There are three (3) action codes which are used as follows:

   a. Add

      The code for adding an element to a term's structure is the letter A. This will enter the coded item in an empty field, or if there are already entries in the field, the coded item will be added to these. This code should not be used for Group Code (Block 2) or Scope Note (Block 3) unless there is no data in these fields at the time the addition is being attempted.

b. Delete

The code for deleting an element from a term's structure is the letter D. This will delete the coded item from the field it occupies. In order for the Delete function to operate, the coded item must match precisely the entry in the file. This code should not be used at all for Group Code (Block 2) and should be used for Scope Note (Block 3) only when it is determined that an existing Scope Note is unnecessary.

c. Change

The code for changing an entire field (e.g., Group Code, Scope Note, all Narrower Terms, etc.) is the letter C. This removes all data in the specified field and replaces it with the new information supplied. It is usually used to change Group Code (Block 2) and Scope Note (Block 3), but it may be used in Broader Terms (Blocks 4), Narrower Terms (Block 5), Used For (Block 6) and Related Terms (Block 7), if the changes are so extensive that it is easier to enter the result desired than to treat each entry individually. However, remember that when using the Change transaction, all the information which is to appear in the field must be entered on the DJF.

2. Group Code Changes

Group Code changes should be entered as follows:

1. Main Term (50 Character Limit)	2. Group Code	Act.
TERM_ MICROCOUNSELING	GROUP_ 090	C

3. Scope Note Changes

Scope Note changes should be entered as follows:

1. Main Term (50 Character Limit)
TERM_ NONFORMAL EDUCATION
2. Group Code
GROUP_
Act ☐
3 Scope Note (380 Character Limit)
SCOPE_ ORGANIZED EDUCATION, WITHOUT FORMAL SCHOOLING OR INSTITUTIONALIZATION IN WHICH KNOWLEDGE, SKILLS, AND VALUES ARE TRANSMITTED THROUGH RELATIVES, PEERS, OR OTHER COMMUNITY MEMBERS.
Act ☐

4. Generic Structure Changes

Extreme care should be exercised in making changes to generic structure to ensure that the validity of the hierarchy is maintained. The following examples will illustrate some of the problems which can occur and show how they can be solved.

a. Broader Term Changes

Assume the term STUDENT TEACHERS has the Broader Terms: STUDENTS; SUBPROFESSIONALS; and TEACHERS. Upon examination, it is determined that within the ERIC system, STUDENT TEACHERS always refers to COLLEGE STUDENTS who are practice teaching, and that also as the term is used in ERIC, STUDENT TEACHERS are not always SUBPROFESSIONALS. The required changes would be entered as follows:

1. Main Term (50 Character Limit)
TERM_ STUDENT TEACHERS

4. Broader Terms	Act.
BT_ STUDENTS	D
COLLEGE STUDENTS	A
SUBPROFESSIONALS	D

Note that the term STUDENTS must be deleted to prevent an invalid double appearance of STUDENT TEACHERS in the hierarchy. In the example, the same end result could have been accomplished as follows:

1. Main Term (50 Character Limit)

TERM_ STUDENT TEACHERS

4. Broader Terms

	Act.
BT_ COLLEGE STUDENTS	C
TEACHERS	

Since the Change transaction clears the field and replaces it with the new information, it was not necessary to enter Deletes for STUDENTS and SUBPROFESSIONALS.

b. Narrower Term Changes

Assume that examination of the Narrower Terms for STUDENTS shows that MEDICAL STUDENTS has been omitted from the list, and that LOW ACHIEVERS erroneously carries both LOW ABILITY STUDENTS and STUDENTS as Broader Terms. The required changes would be entered as follows:

1. Main Term (50 Character Limit)

TERM_ STUDENTS

5. Narrower Terms

	Act.
NT_ MEDICAL STUDENTS	A
LOW ACHIEVERS	D

In this case, the Change transaction would not be used because of the large number of terms in this field which are not being changed. The result could, of course, have been accomplished by Broader Term changes to MEDICAL STUDENTS and LOW ACHIEVERS, but this would have required two DJF's. Unless other changes to these terms were required, the above example would be preferred.

c. Hierarchical Insertions

When a new term is inserted in the middle of an existing hierarchical string, it is almost invariably necessary to prepare a second DJF to modify one or more existing terms in order to prevent invalid double postings. For example, assume it becomes desirable to collect several of the Narrower Terms to CULTURE under a new descriptor NON WESTERN CULTURE. The new Main Term might be added as follows:

(Only generic entries are shown.)

1. Main Term (50 Character Limit)

TERM_ NON WESTERN CULTURE	

5. Narrower Terms

		Act.
NT_ AFRICAN CULTURE		
BURMESE CULTURE		
CHINESE CULTURE		
ISLAMIC CULTURE		
KOREAN CULTURE		

This would establish the term in the *Thesaurus*, but if no more were done, all of the narrower Terms to NON WESTERN CULTURE would show both NON WESTERN CULTURE and CULTURE as Broader Terms, and each would appear twice in the CULTURE hierarchical display. Therefore, a second DJF modifying an existing term must accompany the one adding the new term. In this case, it would appear as follows:

1. Main Term (50 Character Limit)

TERM_ CULTURE

5. Narrower Terms

NT_ AFRICAN CULTURE	D
BURMESE CULTURE	D
CHINESE CULTURE	D
ISLAMIC CULTURE	D
KOREAN CULTURE	D

5. Synonym (Used For) Changes

The addition of a nonpostable synonym must be accomplished by submitting a DJF on the Main Term to which it will be cross-referenced. If, for example, it is desired to provide the entry TEACHER COORDINATORS USE INSTRUCTOR COORDINATORS, a DJF must be submitted as follows:

1. Main Term (50 Character Limit)

TERM_ INSTRUCTOR COORDINATORS

6. Used For (i.e., Synonyms)	Act.
UF_ TEACHER COORDINATORS	A

If a term which has been entered as a Use Reference is to be established as a new Main Term, a separate DJF must be submitted on the former Main Term to accomplish the removal of the Use Reference, as follows:

1. Main Term (50 Character Limit)

TERM_ MOTION

6. Used For (i.e., Synonyms)	Act.
UF— ANIMATION	D

6. Related Term Changes

Related Term changes can be made by adding and/or deleting terms from the field as necessary.

1. Main Term (50 Character Limit)

TERM_ ANOMALIES

7. Related Terms	Act.
RT—ANTHROPOLOGY	D
PRENATAL INFLUENCES	A

However, the Change transaction is advisable if changes are extensive, as follows:

1. Main Term (50 Character Limit)

TERM_ ANOMALIES

7. Related Terms	Act.
RT_ GENETICS	C
HEREDITY	
HUMAN BODY	
MONGOLISM	
PREGNANCY	
PRENATAL INFLUENCES	
STATISTICAL ANALYSIS	

However, there is a Related Term change which is frequently overlooked. When two terms which are in the file as Related Terms are determined to have a generic relationship, the DJF which establishes the generic relationship must also delete the Related Term reference as follows:

1. Main Term (50 Character Limit)

TERM_ ACADEMIC FAILURE

4. Broader Terms	Act.
BT_ ACADEMIC PERFORMANCE	A

7. Related Terms	Act.
RT_ ACADEMIC PERFORMANCE	D

7. Information Block

The Information Block on DJF's modifying an existing term are completed in essentially the same manner as for entering a new term, except that accession numbers and authorities are not required when the appropriateness of the change is obvious. The definition block should be used to note the reason for the change.

TRANSMITTAL OF DJF

The Clearinghouse should retain a copy of all DJF's submitted for reference in case telephone coordination is necessary.

1. RIE Shipments

DJF's generated as a result of indexing documents for Research in Education (RIE) are included in a specific RIE issue shipment, must be transmitted to the ERIC Facility either before or simultaneously with the RIE shipment. Detailed instructions for the RIE Shipping Procedure are listed in Section 4 of this Manual.

2. CIJE Shipments

DJF's generated as a result of indexing documents for Current Index to Journals in Education (CIJE) must be transmitted simultaneously with the CIJE shipment. DJF's should not be sent with the shipment to the CIJE Contractor. Detailed instructions for the CIJE Transfer Procedure are listed in Section 9 of this Manual.

3. Thesaurus Changes

Subject specialists wishing to add, change, or delete existing structuring, may transmit DJF's to the ERIC Facility as they occur.

ERIC FACILITY PROCESSING

Upon receipt of a DJF, the ERIC Facility Lexicographer performs a review and edit to ensure:

1. Compliance with the Rules for Thesaurus Preparation.
2. Compliance with the requirements of Section 8 (this section) of the ERIC Processing Manual.
3. Completeness and validity of generic structure and cross-reference.

If the Facility Lexicographer believes a significant change to the DJF is required, the initiating Clearinghouse will be contacted by telephone and the proposed change(s) discussed. Questions which cannot be resolved in this manner will be referred to Central ERIC. Following Central ERIC action, the initiating Clearinghouse will be informed as to disposition of the DJF.

8.6 VOCABULARY IMPROVEMENT PROGRAM

8.6.1 Background

1. Vocabulary Development

Establishing and maintaining an indexing vocabulary for a system which has a subject field as broad as that of ERIC and which, in addition, is decentralized on a subject basis, has presented a number of unique problems. At the inception of ERIC, for example, an effort of the magnitude of Project Lex (then in progress) was out of the question because the expense was more than could be supported or justified. The decision was made to let the documents being indexed determine the vocabulary.

To avoid overloading the vocabulary with seldom used, highly specific terms (such as personal names, text names, geographic locations, etc.), indexing was divided into two types: Descriptors, which would be included in a controlled hierarchically structured vocabulary (Thesaurus); and Identifiers, which would be uncontrolled, and unstructured, but which would permit use of specific indexing for precise retrieval. (See Section 8.1.)

The Descriptors which had been used for "free indexing" a collection of documents on disadvantaged children in mid-1966 (Section 8.3.1) were chosen as a core vocabulary upon which the ERIC Thesaurus could be built. A Descriptor Justification Form (DJF) (Section 8.5.3, Figure 8-1) was designed to permit entry of new terms with possible Synonyms (UF), Broader Terms (BT), Narrower Terms (NT), and Related Terms (RT). Provisions were also made for entering Scope Notes, a Descriptor Group identification code, and justification for the term selection, including authority citations. The Rules For Thesaurus Preparation were published (Section 8.3.3), and procedures for submitting candidate terms (Section 8.5) were established.

Briefly, the procedures call for submittal of a DJF for a candidate term when--and only when--the term is required for indexing a document in hand. The DJF is prepared by the indexer from one of the ERIC Clearinghouses, reviewed by Clearinghouse supervision, and forwarded with a copy of the document input resume to the ERIC Processing and Reference Facility. At the

Facility, the DJF is reviewed and edited by a Lexicographer for consistency, avoidance of proliferation, clarity, and conformance with rules and guidelines. Further review is imposed at the discretion of Central ERIC.

On the whole, this procedure has been quite successful. Thesaurus growth, which was quite rapid during the early years, has slowed markedly in the last several years, and is now relatively stable at around 5,000 main (postable) terms. However, the vocabulary is by no means perfect. With up to 20 different organizations scattered across the country indexing documents and submitting candidate terms, with the pressures of meeting publication deadlines working against extensive research and coordination, and with substantial turnover in some Clearinghouses, it was inevitable that some mistakes would occur and that some less-than-optimal decisions would be made. Over the years, a number of shortcomings in the vocabulary have developed.

2. Vocabulary Problems

The categories of current shortcomings in the ERIC vocabulary are listed below:

- Poor, incomplete, or invalid hierarchies;
- Synonymy - Two or more terms, which, for the purposes of ERIC indexing and retrieval, can be considered synonyms, e.g., HEREDITY and GENETICS;
- Poor word choices, e.g., PUBLICIZE rather than PUBLICITY;
- Misspellings, e.g., PARODOX for PARADOX;
- Ambiguity, e.g., prior to the introduction of PROGRAMING (BROADCAST) in 1971, the term PROGRAMING had been applied to both computer programming and broadcast programming;
- Low postings, e.g., HORIZONTAL TEXTS and VERTICAL TEXTS with one posting each from the 1966 Disadvantaged Collection;
- Scattering in the Identifier file, e.g., 17 variations in entries for Title III of the Elementary and Secondary Education Act.

Unfortunately, correcting most of these shortcomings is not accomplished simply, particularly when they have had time to "set". In the case of hierarchical defects, making a change is mechanically relatively easy, since only one or two DJF's are usually required. The problem arises in making sure that the change is in fact a correction, i.e., that the new structure is better than the old, and that there are no unwanted side effects. On the other hand, the other deficiencies are intellectually rather simple--you pick the preferred term and eliminate the non-preferred one(s). However, the implementation mechanics are complex and cumbersome. The ERIC software, which was designed to insure synchronization between the Resume Master Data Set (linear file) and the Satellite Master Data Sets (inverted files), will not permit the deletion of a term from the Thesaurus so long as there are documents posted to (indexed by) that term. Until recently, in order to delete a Thesaurus term, it was necessary to prepare a separate transaction for each document indexed by that term to delete the term from the Resume Master Data Set, and it would then be deleted from the Satellite Master Data Set by the system. At the same time, if you wanted to avoid an intolerable loss of information, a second set of transactions had to be prepared, replacing the deleted term with the preferred one. Since the median posting density of Thesaurus terms is about 50 documents per term, about 100 transactions would typically be required to accomplish each change. Obviously, not many changes could be made under those conditions.

In 1972, the ERIC Facility completed and tested software which permits changes of this type (to either Descriptors or Identifiers) with a single transaction which deletes a term and transfers its postings (if desired) to another term (or terms). With this added capability, the ERIC network is in a position to make all of the changes required to develop its vocabulary into an optimal tool for indexing and retrieval. This, however, is not a task which can be performed in a vacuum by an individual or even by a single group. Above all, the vocabulary must be responsive to the needs of the system it serves, and this means primarily the people of all components, most assuredly including the users of the system outputs.

8.6.2 Vocabulary Improvement

The ERIC Vocabulary Improvement Program is an integrated operation. A particular emphasis is given to system-wide participation, and vocabulary change recommendations of any kind are solicited from all components and users of the system. These include recommended changes in vocabulary conventions, vocabulary structure, and the basic terminology. A multi-faceted approach is used in the program. There are three major facets, each approached in a somewhat different fashion.

- Descriptor Cross-Reference Changes. These are changes in the BT, NT, and RT references in the *Thesaurus* itself and do not affect directly the question of which documents are indexed by which term(s). Consequently, these changes have little if any impact on the existing data base. Further, evaluation of cross-reference changes requires that they be viewed in the context of the surrounding "terminology terrain" which requires display of (at the very least) a significant portion of the *Thesaurus*, if not its entirety. Full-scale coordination of cross-reference changes among ERIC users is not practiced, as such activity would prove burdensome in terms of dissemination costs and evaluation time.

- Descriptor Changes. These are changes to the *Thesaurus* indexing as it exists in the data base, where a given Descriptor is removed from the file and its postings are transferred to one or more existing Descriptors or to a new Descriptor added to the file for this purpose. Since these changes have an immediate and significant impact on users of the file, as well as on day-to-day operations of the ERIC network, the widest practical coordination base is desired.

- Identifier Changes. A program to detect and correct Identifier variations has been implemented. The data base is being corrected via transfer-and-delete operations. Since the Identifiers are by design unstructured and uncontrolled, full user coordination at the level required for Descriptor changes is not practiced.

The second and third facets encompass actual changes to the indexing terminology and are the subject of Sections 8.6.3 and 8.6.4.

8.6.3 Descriptor (Thesaurus) Changes

Changes in Descriptors or Thesaurus terms are based largely upon usage in the data base and upon the detection and correction of situations of postable synonyms appearing in the vocabulary. Also, obvious misspellings and word-form corrections are required in some instances. The following paragraphs discuss Descriptor changes based on usage data, Descriptor changes based on the elimination of synonyms, and the procedures used in actually accomplishing changes.

1. Descriptor Editing Based on Usage

Descriptors that are posted very heavily (over 1,000 postings) should be examined for their utility. Some of these Descriptors may be quite valid (e.g., TEACHER EDUCATION) and very reflective of the emphases in the data base. However, the heavy postings on some others may indicate that they are too general to be useful in either announcement media or manipulative retrieval (e.g., EDUCATIONAL PROGRAMS). It may be that Descriptors in this latter case should be either: (1) names of Descriptor Groups; (2) "array" terms each with a Scope Note cautioning against its use in indexing and retrieval and with cross-references to more specific Descriptors constituting the "tops" of appropriate generic families; or (3) provided with delimiting Scope Notes to avoid ambiguous usage in the future.

Descriptors used too infrequently tend to "clutter", unnecessarily impeding easy use of the data base, the indexes, and the Thesaurus. Descriptors used less than about five (5) times should be examined for possible removal from the active vocabulary, except for relatively recent additions to the vocabulary. "Old", low-usage descriptors should be either: (1) converted to nonpostable terms, with USE references inserted and index postings transferred to the referred-to-Descriptors; (2) deleted from the Thesaurus, but with postings transferred to selected Descriptors; or very occasionally, (3) deleted entirely from the Thesaurus, with postings also deleted from the data base.

2. Elimination of Postable Synonyms

If postable synonyms exist in the Thesaurus, some documents will be indexed by one such synonym and some by the other. Retrieval via one synonym will thus be incomplete. Such a condition is highly undesirable. Instances of postable synonyms must be detected, preferred versions selected, USE references to these preferred versions created, and data-base postings transferred from the non-preferred term to the preferred Descriptor.

3. Thesaurus Change Procedure

The flow chart of the Thesaurus Change Procedure is shown in Figure 8-2. Although many recommendations for change originate from the day-to-day work of the Facility Lexicographer (e.g., with term cross-references), change recommendations are solicited from the entire ERIC network and all users of the system. All changes, whether from internal or external sources, will be processed as shown in Figure 8-2.

a. Kinds of Changes

There are a number of different kinds of changes which can be made:

- Simple Merge - Used to eliminate synonyms and to post low-use terms to the next higher generic level.

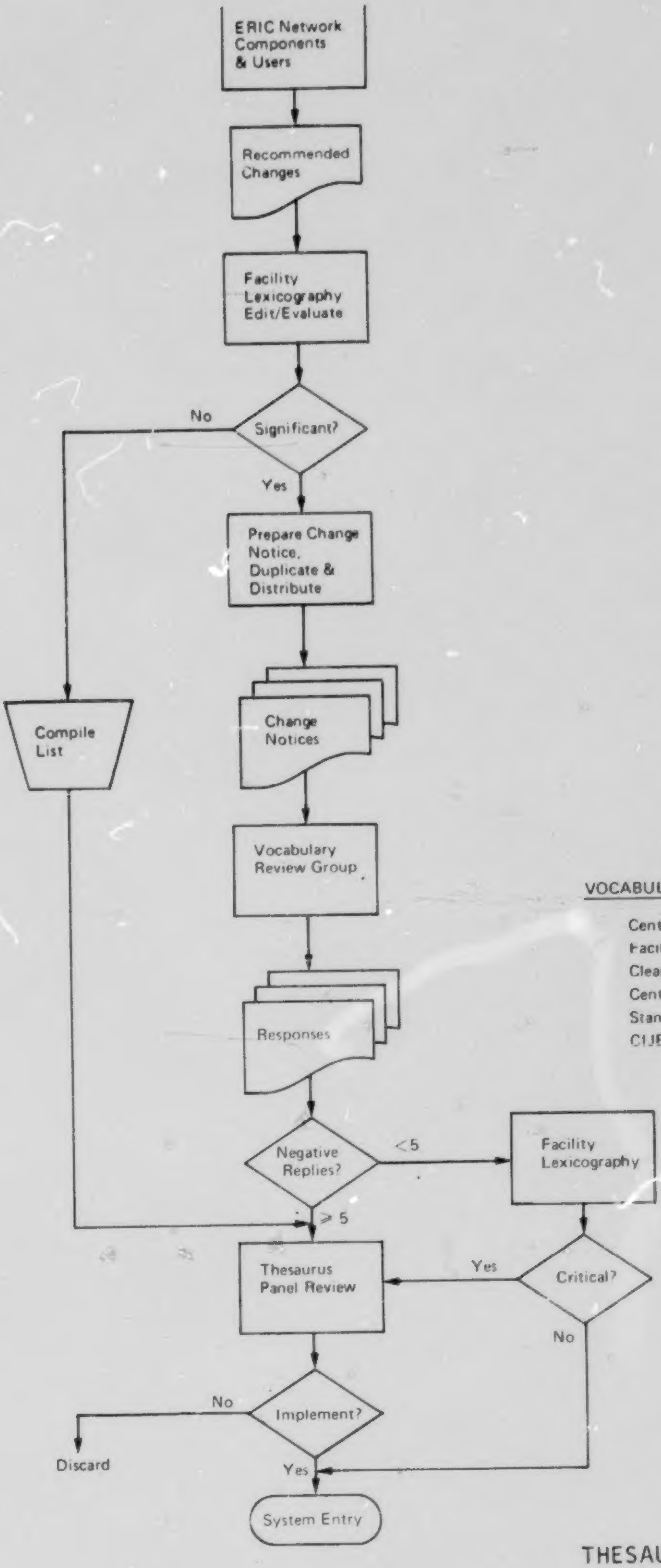
  Examples: Transfer postings on HEREDITY to GENETICS

  Transfer postings on GIRLS CLUBS to YOUTH CLUBS

- Word Change - Used to correct misspellings and change word forms.

  Examples: Transfer postings on PARODOX to (new term) PARADOX

  Transfer postings on PUBLICIZE to (new term) PUBLICITY



VOCABULARY REVIEW GROUP

Central ERIC
Facility
Clearinghouses
Centers
Standing Orders
CIJE Contractor

FIGURE 8-2
THESAURUS CHANGE PROCEDURE

- o Multiple Merge - Used to eliminate multiple synonyms or to post several low-use terms to the next higher generic level. May include word change.

  Examples: Transfer postings on MARKS and GRADES (REPORT) to GRADES (SCHOLASTIC)

  Transfer postings on QUICHE and YUCATEC to MAYAN LANGUAGES

  Transfer postings on HETEROPHORIA and HETEROTROPIA to (new term) STRABISMUS

- o Term Split - Used to post low-use terms to two (or more) more general terms (not necessarily broader terms of the term in question), when transfer to the next higher generic level might result in significant information loss. The receiving terms can then be coordinated for searching to retain specificity.

  Examples: Transfer terms on FORESTRY OCCUPATIONS to FORESTRY and AGRICULTURAL OCCUPATIONS

  Transfer terms on OCEAN ENGINEERING to OCEANOLOGY and ENGINEERING

- o Simple Delete - Used to remove terms which have been added to the Thesaurus erroneously, or which have proved to have no utility.

  Examples: Delete postings from SATELLITE LABORATORIES

  Delete postings from HORIZONTAL TEXTS

  Delete postings from VERTICAL TEXTS

The transfer-and-delete programs automatically generate transactions to purge (delete) terms from the Thesaurus when their postings are transferred. If a cross-reference is desired (e.g., HEREDITY Use GENETICS), this must be added separately.

Such cross-references will be shown in the Thesaurus as former (deleted) main terms, along with month and year of deletion. If a term deleted from the Thesaurus should be used as an Identifier, it is necessary (at the present time) to generate/add a separate identifier transaction for each document indexed by the term to retain the postings.

b. Change Recommendations

(1) Information Required - In order for changes to be processed efficiently, the following information is required for each change proposed:

- o Statement of the Desired Change - Simple, imperative sentences like those used in the examples above are preferred.
- o The Number of Postings - Required for each term involved in the change, this information may be obtained from the publication ERIC Descriptor and Identifier Usage Report. The date (month/year) of the postings count should be noted. For changes other than synonyms and word form changes, the accession number of the last known document indexed by each term is also desired. The latest accession number indicates the timeliness of the terminology in question.
- o Reason for Change - e.g., eliminate synonyms, correct spelling, etc.
- o Justification for the Change - Unless the change is a correction of an obvious error, such as a misspelling (PARODOX/PARADOX), justification for the change must be supplied. Authorities for definitions should be indicated. Generally, in the case of synonyms, postings will be transferred to the term with the larger number of postings. If a given recommendation is to reverse this practice, the reasons for doing so must be explicit to

justify the added expense. The timeliness of terminology should be examined before recommending the transfer of postings to a higher generic level, or a simple deletion. Low use is not _per se_ sufficient reason for deletion; a certain amount of time has to be allowed for a new term to build up postings.

(2) Submittal of Recommendations - Change recommendations do not have to be in any particular format, so long as the required information is included. Recommendations should be addressed to:

ERIC Processing and Reference Facility
Attn: Lexicographer
4833 Rugby Avenue, Suite 303
Bethesda, Maryland 20014

c. Evaluation and Edit

The Lexicographer evaluates incoming Change Recommendations and separates them into three categories as follows:

- Category 1 - Significant, having major impact on indexing and/or potentially controversial.
- Category 2 - Obviously necessary or useful, having minor impact and/or not likely to be contested.
- Category 3 - Obviously trivial, contrary to rules, or insufficient justification or support for the change.

Virtually all of the Change Recommendations fall into Category 1 and are processed through the coordination procedure described in the following paragraphs. However, a few Category 2 changes are received, and Category 3 changes, while not anticipated, are possible. The Lexicographer records all Category 2 and 3 change proposals in a list-form report which will be reviewed by the Thesaurus Advisory Panel (See Item g. below).

d. Change Notice

The Lexicographer prepares for each Category 1 Change Recommendation a Thesaurus Term Change Notice (Figure 8-3) completing sections 1 through 3. The forms are then duplicated and distributed in two (2) copies to each member of the ERIC Vocabulary Review Group.

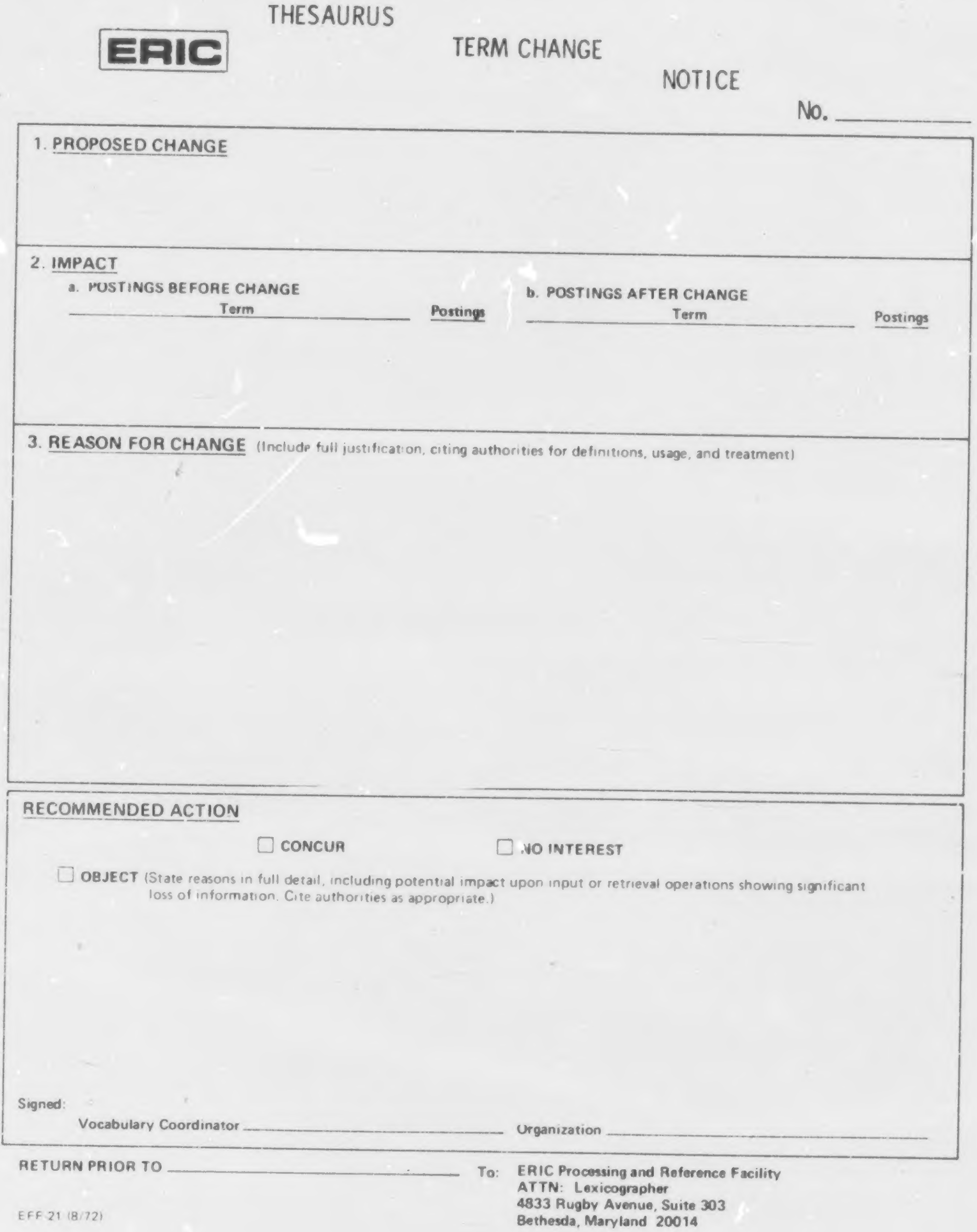
e. Vocabulary Review Group Composition and Responsibilities

The membership of the Vocabulary Review Group has been chosen to achieve the broadest possible coordination base consistent with efficient operation. A written invitation from Central ERIC to join this group was distributed in mid-1973 to a total of approximately 60 organizations. A total of 35 organizations responded favorably to the invitation, indicating interest in the Vocabulary Improvement Program and designating individuals who would participate. These 35 organizations make up the existing Vocabulary Review Group; their composition includes 16 ERIC Clearinghouses, 10 university libraries, and 9 agencies of state education departments. Each member of the Vocabulary Review Group designates a responsible individual (Vocabulary Coordinator) to review all Change Notices, coordinating internally as desired.

Each Vocabulary Coordinator reviews each Change Notice as received, completes the RECOMMENDED ACTION section, signs the form, and returns one (1) copy to the Lexicographer at the ERIC Facility within two (2) weeks of receipt. This deadline is established to avoid unwarranted delays or excessive follow-up. Failure to respond within the time limit established is treated as an indication of concurrence or lack of interest in the change.

f. Tabulation of Responses

The Facility Lexicographer tabulates responses to each Change Notice as they are received. After the cut-off date, the objections to each change are counted.



ERIC

THESAURUS
TERM CHANGE
NOTICE

No. ____________

1. **PROPOSED CHANGE**

2. **IMPACT**

a. POSTINGS BEFORE CHANGE

Term	Postings

b. POSTINGS AFTER CHANGE

Term	Postings

3. **REASON FOR CHANGE** (Include full justification, citing authorities for definitions, usage, and treatment)

RECOMMENDED ACTION

☐ CONCUR ☐ NO INTEREST

☐ OBJECT (State reasons in full detail, including potential impact upon input or retrieval operations showing significant loss of information. Cite authorities as appropriate.)

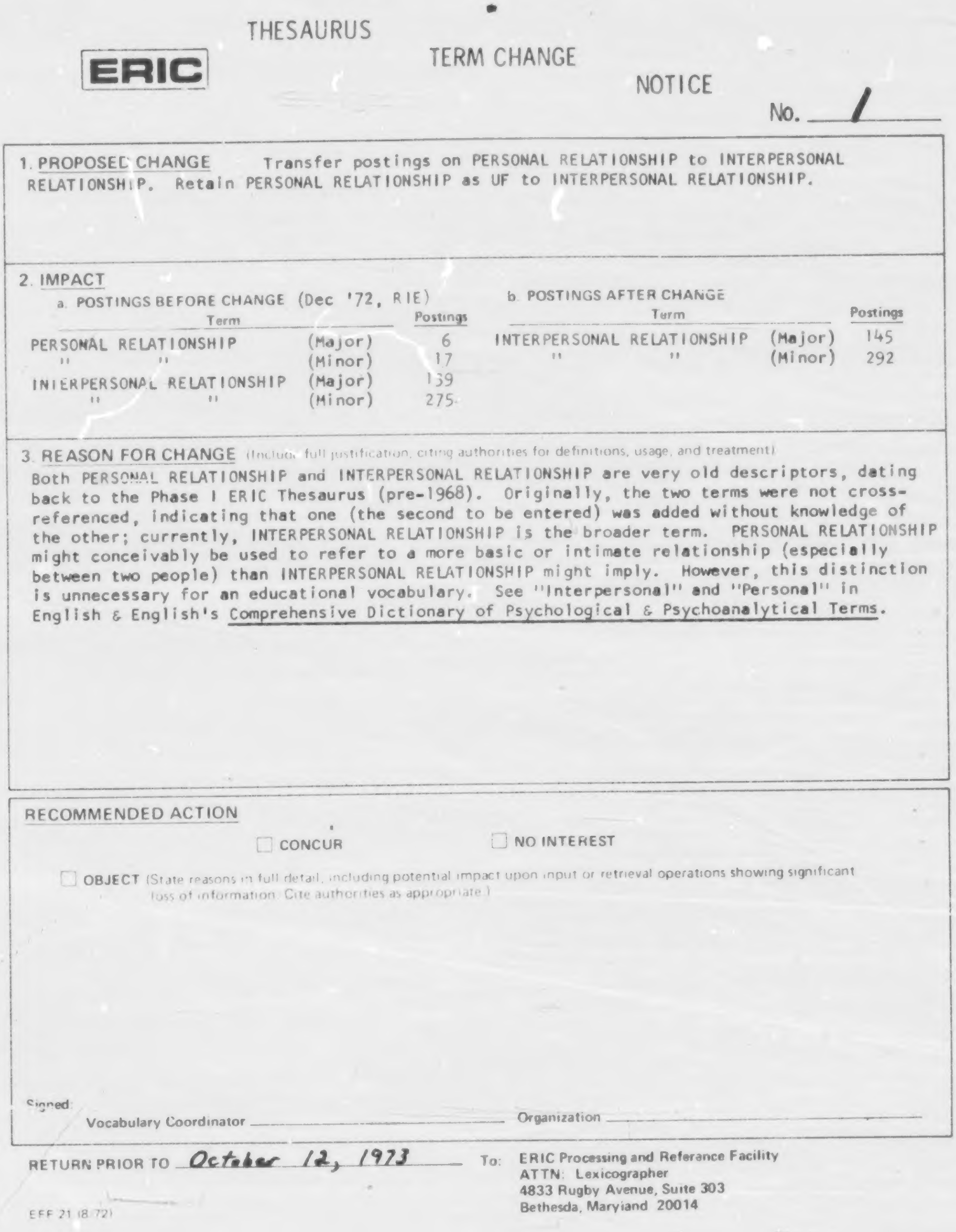
Signed:
Vocabulary Coordinator ____________ Organization ____________

RETURN PRIOR TO ____________

To: ERIC Processing and Reference Facility
ATTN: Lexicographer
4833 Rugby Avenue, Suite 303
Bethesda, Maryland 20014

EFF-21 (8/72)

FIGURE 8-3
ERIC THESAURUS TERM CHANGE NOTICE
A. BLANK FORM



ERIC

THESAURUS TERM CHANGE NOTICE

No. 1

1. PROPOSED CHANGE Transfer postings on PERSONAL RELATIONSHIP to INTERPERSONAL RELATIONSHIP. Retain PERSONAL RELATIONSHIP as UF to INTERPERSONAL RELATIONSHIP.

2. IMPACT

a. POSTINGS BEFORE CHANGE (Dec '72, RIE)

Term		Postings
PERSONAL RELATIONSHIP	(Major)	6
" "	(Minor)	17
INTERPERSONAL RELATIONSHIP	(Major)	139
" "	(Minor)	275

b. POSTINGS AFTER CHANGE

Term		Postings
INTERPERSONAL RELATIONSHIP	(Major)	145
" "	(Minor)	292

3. REASON FOR CHANGE (Include full justification, citing authorities for definitions, usage, and treatment)

Both PERSONAL RELATIONSHIP and INTERPERSONAL RELATIONSHIP are very old descriptors, dating back to the Phase I ERIC Thesaurus (pre-1968). Originally, the two terms were not cross-referenced, indicating that one (the second to be entered) was added without knowledge of the other; currently, INTERPERSONAL RELATIONSHIP is the broader term. PERSONAL RELATIONSHIP might conceivably be used to refer to a more basic or intimate relationship (especially between two people) than INTERPERSONAL RELATIONSHIP might imply. However, this distinction is unnecessary for an educational vocabulary. See "Interpersonal" and "Personal" in English & English's Comprehensive Dictionary of Psychological & Psychoanalytical Terms.

RECOMMENDED ACTION

☐ CONCUR ☐ NO INTEREST

☐ OBJECT (State reasons in full detail, including potential impact upon input or retrieval operations showing significant loss of information. Cite authorities as appropriate.)

Signed
Vocabulary Coordinator ______ Organization ______

RETURN PRIOR TO October 12, 1973 To: ERIC Processing and Reference Facility
ATTN: Lexicographer
4833 Rugby Avenue, Suite 303
Bethesda, Maryland 20014

EFF 21 (8/72)

FIGURE 8-3
ERIC THESAURUS TERM CHANGE NOTICE
B. COMPLETED FORM

- Significant Objections - If there are five (5) or more objections, the Change Notice is set aside for review by the Thesaurus Advisory Panel at its next session.

- None/Few Objections - If there are fewer than five (5) objections, the Lexicographer examines the objections received to determine whether the change is likely to have a critical impact on an objector's operations. If so, the Change Notice is set aside for review by the Thesaurus Advisory Panel. If not, the change is entered into the system.

g. Thesaurus Advisory Panel Review

(1) Composition - The Thesaurus Advisory Panel includes a Chairperson (Central ERIC), a Lexicographer (ERIC Facility), an ERIC Clearinghouse representative, and 5-7 other members selected from public and private agencies.

(2) Schedule - The Thesaurus Advisory Panel confers at least quarterly, usually during the 3rd week of January, April, July, and October. Additional meetings may be scheduled, as necessary. This schedule is timed to permit the decisions of the Panel to be incorporated into the file prior to release of cumulative indexes, the quarterly *Thesaurus Updates*, the quarterly ERICTAPE updates, and the annual issuance of the *ERIC Descriptor and Identifier Usage Report*.

(3) Agenda - Depending upon the material available for consideration, the Panel takes action in the following areas:

- Review, approve, disapprove, or modify changes in Group Codes and cross-reference structure.

- Examine the list-form report of Category 2 and Category 3 Change Recommendations; confirm or reverse decisions, or re-classify items to Category 1 for full coordination.

- Consider all Change Notices to which five (5) or more objections have been received, as well as those judged critical; examine pros and cons of each change in the light of total system needs, and determine disposition.

- Discuss other vocabulary-related matters, including such future plans and programs as: rules changes or clarifications, format changes, and publications changes.

h. Implementation and Dissemination

Immediately after each Panel meeting, approved changes are implemented, using the transfer-and-delete software, so that changes may be incorporated in the next edition of the Thesaurus, RIE cumulative indexes, etc. Changes are reflected in three (3) files maintained at the ERIC Facility: the Resume file, the Thesaurus file and the postings files (Descriptors and Identifiers). However, applicable microfiche records and printed indexes released prior to the implementation of any change are not updated.

Implemented changes having any impact on the day-to-day operations of the ERIC System, are announced to all system components and users via appropriate media (e.g., memoranda to Clearinghouses, and news bulletins for data base users).

8.6.4 Identifier Changes

1. Identifier Scattering

ERIC Identifiers are essentially uncontrolled, and a great many synonyms have crept into the Identifier list over the years, e.g., different forms and/or abbreviations and/or syntactical variants of names of organizations. It is often impractical for the user, with this state of affairs, to insure that he has detected all variants of a particular Identifier. An on-going program to detect and correct Identifier variations has been implemented. For each set of Identifier synonyms, a preferred version is being selected. The data base is corrected via transfer-and-delete operations. Since Identifiers are by design neither structured nor controlled, full user coordination is not required.

2. Sources and Information Required

Identifier Change Recommendations (as with Descriptors) are solicited from all ERIC components and users. Change recommendations should generally conform to the pattern specified for Descriptors, except that justifications need not be as complete.

3. Review and Edit

Identifier Change Recommendations are reviewed and edited by the Facility Lexicographer and automatically assigned to either Category 2 or 3.

4. Coordination

A list-form report of the Lexicographer's decisions on Identifier Change Recommendations is submitted to the Thesaurus Advisory Panel for confirmation, reversal, or re-classification. Re-Classified Identifier Change Recommendations (i.e., from Category 2 or 3 to Category 1) will be fully coordinated in the same manner as Thesaurus Change Notices.

5. Implementation and Dissemination

Implementation and dissemination will be accomplished in the same manner as Descriptor changes.

SECTION OUTLINE

PAGE

9.1 INTRODUCTION 355

9.2 ACQUISITIONS AND SELECTION 355

9.3 HANDLING AND SHIPPING 357

9.4 DESCRIPTIVE CATALOGING 360

9.5 ANNOTATING 364

9.6 INDEXING 365

9.7 VOCABULARY MAINTENANCE 365

FIGURES

PAGE

9-1. Clearinghouse Accession Log Sheet (For Journal Articles) - EFF-38 361

9-2. Journal Article Resume Form - OE Form 6027

A. Blank 362

B. Completed 363

JOURNAL ARTICLE PROCESSING

Summary of Significant Rules

1. The guidelines and rules described in Sections 1 through 7 of this Manual apply equally to the processing of journal articles, unless an exception is specifically noted in this Section.

2. Core education journals are covered comprehensively "cover-to cover". Education-related journals are covered selectively, for their articles relevant to the field of education.

3. Journals are assigned on the basis of subject matter to ERIC Clearinghouses for processing except where the topical area covered by the journals is either too broad or outside the scope of any existing Clearinghouse, in which case it is processed by the CIJE Contractor.

4. Any education-related article in any journal may be input by a Clearinghouse to CIJE on a "one-shot" basis, if the article is of sufficient quality.

5. Potential new journals for coverage by CIJE should be recommended to the CIJE Contractor, and must have approval before coverage can begin.

6. Completed journal article resume forms (and not the articles themselves) are sent to the CIJE Contractor as the journal issues are completed and not (as with RIE input) simply on a weekly basis.

7. The titles of periodicals are entered in full unabbreviated form, with the exception of initial articles, which are dropped.

8. Brief annotations, in lieu of full abstracts, are prepared selectively, for those journal articles with uninformative, non-expository titles.

9. The total number of Descriptors (major and minor) assigned should not exceed ten (10); the total number of major Descriptors assigned should not exceed five (5). The total number of Identifiers (major and minor) assigned should not exceed five (5); the total number of major Identifiers assigned should not exceed one (1).

9.1 INTRODUCTION

The Current Index to Journals in Education (CIJE) is a monthly index journal designed to announce and disseminate education-related information contained in the current periodical literature. CIJE is a companion journal to Research in Education (RIE); between them they cover a large percentage of the total literature of the field.

The vast majority of journal articles processed by the ERIC system are processed for announcement in CIJE. The few exceptions (e.g., older articles no longer eligible for CIJE, etc.) are discussed in 5.3.19.

The rules and guidelines for processing articles for input to CIJE correspond closely to those described in the preceding pages of this Manual for processing other types of documents. The purpose of this section is, therefore, primarily to describe those instances where the handling or processing of CIJE input differs from that for RIE input. The nature of this section is supplementary; it is not intended to be a stand-alone section. Unless specifically excepted in this section, the rules of Sections 1-8 should be understood to apply equally to the processing of CIJE input.

9.2 ACQUISITION AND SELECTION

Journals from which articles are derived for announcement in CIJE can be thought of as of three types:

1. "Core" Education Journals - journals totally concerned with the field of education. Example: Journal of Educational Research.

2. Education-Related Journals - journals that regularly and frequently contain articles bearing on education but whose main focus is elsewhere. Example: Journal of Applied Psychology.

3. Non-Education Journals - journals that occasionally but infrequently contain an education-related article. Example: Science.

Journals are recommended for CIJE coverage by the ERIC Clearinghouses (or other network components) and are subject to the approval of the CIJE Contractor and Central ERIC. All recommendations, suggestions, justifications, and information (frequency, subscription costs, etc.) concerning new periodicals should be forwarded to the CIJE Contractor. A total list ("Source Journal Index") of journals covered by CIJE is printed in each issue of the journal. As of mid-1974 this list cited more than 700 journals.

Whenever possible, each journal is assigned, on the basis of its subject matter, to a single ERIC Clearinghouse. Example: Language is the responsibility of the ERIC Clearinghouse on Languages and Linguistics. Journals that cover the entire field of education, e.g., American Education, that are relevant to two or more Clearinghouses, e.g., Journal of Creative Behavior, or that fall outside the scope of any existing Clearinghouse, e.g., Journal of Aesthetic Education, are assigned to the CIJE Contractor. It is the individual responsibility of each organization receiving such an assignment to arrange for a subscription to the journal (or other means of obtaining it) and to process the articles contained therein for input to CIJE. This may be done via direct contact with the publisher, or through a subscription agent, as preferred by the responsible organization.

The selection of individual articles within formally covered journals is guided by the following rules:

1. Coverage of "Core" education journals must be "cover-to-cover". This is defined as comprehensive and complete article coverage, normally excluding, however, such items as book reviews, editorials, letters to the editor, newsletters, feature columns, schedules of events, advertising, articles of one page or less, etc.

2. Articles in education-related journals or non-education journals are selected for inclusion in CIJE strictly on the basis of their relationship to the field of education. Articles not related to education are excluded, as are the miscellaneous types of material referred to in #1 above.

In general, a qualitative process is not applicable in selecting journal articles for announcement in CIJE. The nature of the CIJE system is comprehensive rather than selective. It is useful, to educators, librarians, and others, to know and to be able to count on, for example, the fact that all articles appearing in a core journal such as the Harvard Education Review, and all education-related articles appearing in important non-education periodicals such as Science, will, without exception, be announced in CIJE.

In addition to its regular journal article workload, derived from journals formally covered by CIJE, it is permissible for a Clearinghouse to input any good quality education-related article that may be detected in some other journal not regularly covered, e.g., New Yorker. These are called, colloquially, "one-shot" articles. It is not necessary to receive prior approval for "one-shots", but they should be identified as such by writing "one-shot" on both the top of the resume form and in the Comments block on the log sheet. It should be remembered, however, that the journal involved will not be listed in CIJE among those formally covered. Any journal that is repeatedly a source of "one-shot" articles, should be considered for possible formal coverage.

Journal articles are not handled by the ERIC Document Reproduction Service (EDRS) and are therefore not reproduced for users in either microfiche or hardcopy. The articles announced in CIJE are available only through the original journals themselves. For these reasons, questions of legibility, color, page size, type point size, and reproducibility do not enter in to either the selection process or the later cataloging process.

9.3 HANDLING AND SHIPPING

The success of CIJE depends largely on quick announcement. To achieve this objective, the processing of the articles in a particular journal and the forwarding of the completed resumes to the CIJE Contractor should take place within five (5) working days from the time the journal is received at the Clearinghouse.

Consistent with this schedule is rapid follow-up on late-arriving issues. However, since publication schedules are often erratic, e.g., many educational journals cease publication during the summer months, such follow-up should be done with advance knowledge of the particular journal's pattern.

Each Clearinghouse is responsible for keeping the necessary serial records in order to ensure that all issues of a given journal for which they have responsibility are received and processed. If the records are adequate they will obviously prevent the double processing of any given journal issue and will thereby constitute the only duplicate checking step necessary in journal article processing. Responsibility for the duplicate checking of "one-shot" articles rests with the CIJE Contractor.

If a journal should cease publication, notification should be sent to the CIJE Contractor so that the name of the journal can be removed from the "Source Journal Index" in each issue.

Articles selected for announcement in CIJE are accessioned using a unique identifying number, with alphabetic prefixes already established for each Clearinghouse, as follows:

ALPHA PREFIX	NUMERIC SERIES	CLEARINGHOUSE/PROCESSOR	NOTE
AA*	500 000	CIJE Contractor	1969-1971 ERIC Facility 1972- CIJE Contractor
AC	500 000	Adult Education	Merged into CE in 1973
AL	500 000	Linguistics	Merged into FL in 1971
CE	500 000	Career Education	
CG	500 000	Counseling & Personnel Services	
CS	700 000	Reading and Communication Skills	
EA	500 000	Educational Management	
EC	500 000	Handicapped and Gifted Children	
EF	500 000	Educational Facilities	Merged into EA in 1970
EM	500 000	Educational Media & Technology	Merged into IR in 1974
FL	500 000	Languages and Linguistics	
HE	500 000	Higher Education	
IR	500 000	Information Resources	

ALPHA PREFIX	NUMERIC SERIES	CLEARINGHOUSE/PROCESSOR	NOTES
JC	500 000	Junior Colleges	
LI	500 000	Library and Information Sciences	Merged into IR in 1974
PS	500 000	Early Childhood Education	
RC	500 000	Rural Education & Small Schools	
RE	500 000	Reading	Merged into CS in 1972
SE	500 000	Science, Mathematics, and Environmental Education	
SO	500 000	Social Science/Social Studies	
SP	500 000	Teacher Education	
TE	200 000 700 000	Teaching of English	Merged into CS in 1972
TM	500 000	Tests, Measurement, and Evaluation	
UD	500 000	Disadvantaged	
VT	500 000	Vocational & Technical Education	Merged into CE in 1973

*AA = encompasses all journals that cannot be assigned to particular Clearinghouses.

Each Clearinghouse is responsible for keeping appropriate log records to prevent the use of any one Clearinghouse accession number more than once.

CIJE materials should be shipped from the Clearinghouse to the CIJE Contractor on a "journal-by-journal" basis (not simply once a week, as with materials for RIE). When a given journal issue has been completely processed, the resultant data is ready for transfer and this should be accomplished without delay. Elements of the transfer package are:

1. Journal Article Resumes (OE Form 6027)

   Original copies should be sent.

2. Clearinghouse Accession Log Sheet (EFF-38)

   Each journal issue should begin a new log sheet. This form is identical to that used for RIE input, with the exception that a block has been provided for description of the journal issue involved, e.g., Daedalus; Win 1969. An example of a completed log sheet is illustrated in Figure 9-1.

Note that the actual journal articles are not shipped.

All shipments of CIJE materials are to be labeled "ERIC Materials" and are to be transmitted via Air Mail Special Delivery (not Registered Air Mail), or equivalent commercial carrier service when shipment size warrants.

9.4 DESCRIPTIVE CATALOGING

Journal articles require a relatively small subset of the total data elements that can be involved in descriptive cataloging. The descriptive cataloging of articles is therefore a simpler process than the cataloging of other materials.

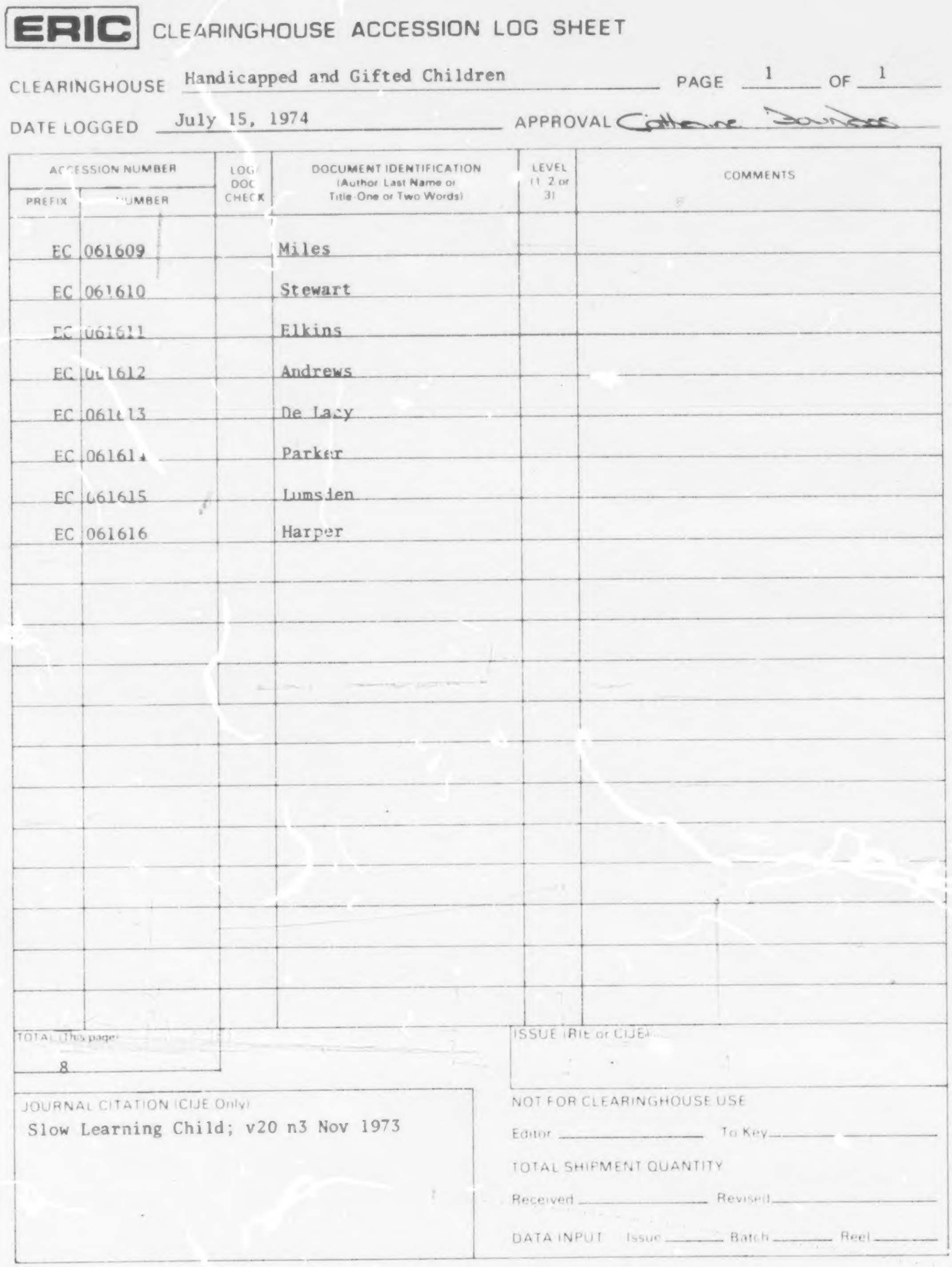
Currently, within the ERIC system, the cataloging of articles is performed on a separate input form (See ERIC Journal Article Resume, Figures 8-2A and B). The intent is, however, to eventually have one single input form, and one set of cataloging rules that will serve all forms of materials. The cataloging rules contained in Section 5 treat all the data elements (and more) involved in journal processing. Any exceptions are noted below.

ERIC Accession Number

The CIJE accession number is assigned to articles by the CIJE Contractor just prior to publication. It consists of the two-letter alpha prefix EJ, followed by six numerics, e.g., EJ 000 123. Clearinghouses should not complete this block.

Clearinghouse Accession Number

See Section 9.3 "Handling & Shipping".



ERIC CLEARINGHOUSE ACCESSION LOG SHEET

CLEARINGHOUSE Handicapped and Gifted Children PAGE 1 OF 1

DATE LOGGED July 15, 1974 APPROVAL

ACCESSION NUMBER		LOG/ DOC CHECK	DOCUMENT IDENTIFICATION (Author Last Name or Title-One or Two Words)	LEVEL (1, 2 or 3)	COMMENTS
PREFIX	NUMBER				
EC	061609		Miles		
EC	061610		Stewart		
EC	061611		Elkins		
EC	061612		Andrews		
EC	061613		De Lacy		
EC	061614		Parker		
EC	061615		Lumsden		
EC	061616		Harper		

TOTAL (This page) 8

ISSUE (RIE or CIJE)

JOURNAL CITATION (CIJE Only)
Slow Learning Child; v20 n3 Nov 1973

NOT FOR CLEARINGHOUSE USE

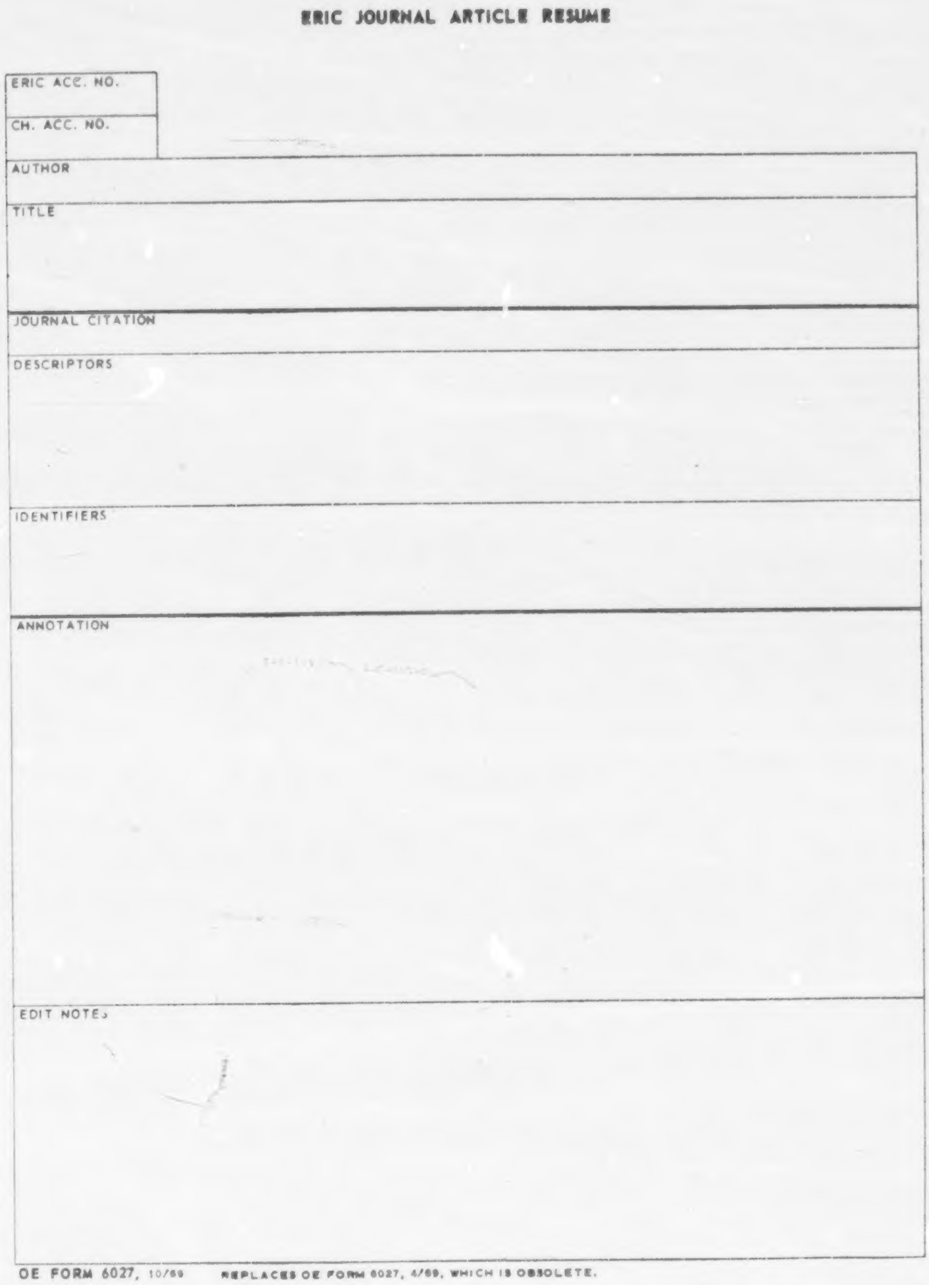
Editor ________ To Key ________

TOTAL SHIPMENT QUANTITY

Received ________ Revised ________

DATA INPUT Issue ________ Batch ________ Reel ________

FIGURE 9-1
CLEARINGHOUSE ACCESSION LOG SHEET
(FOR JOURNAL ARTICLES) - EFF-38

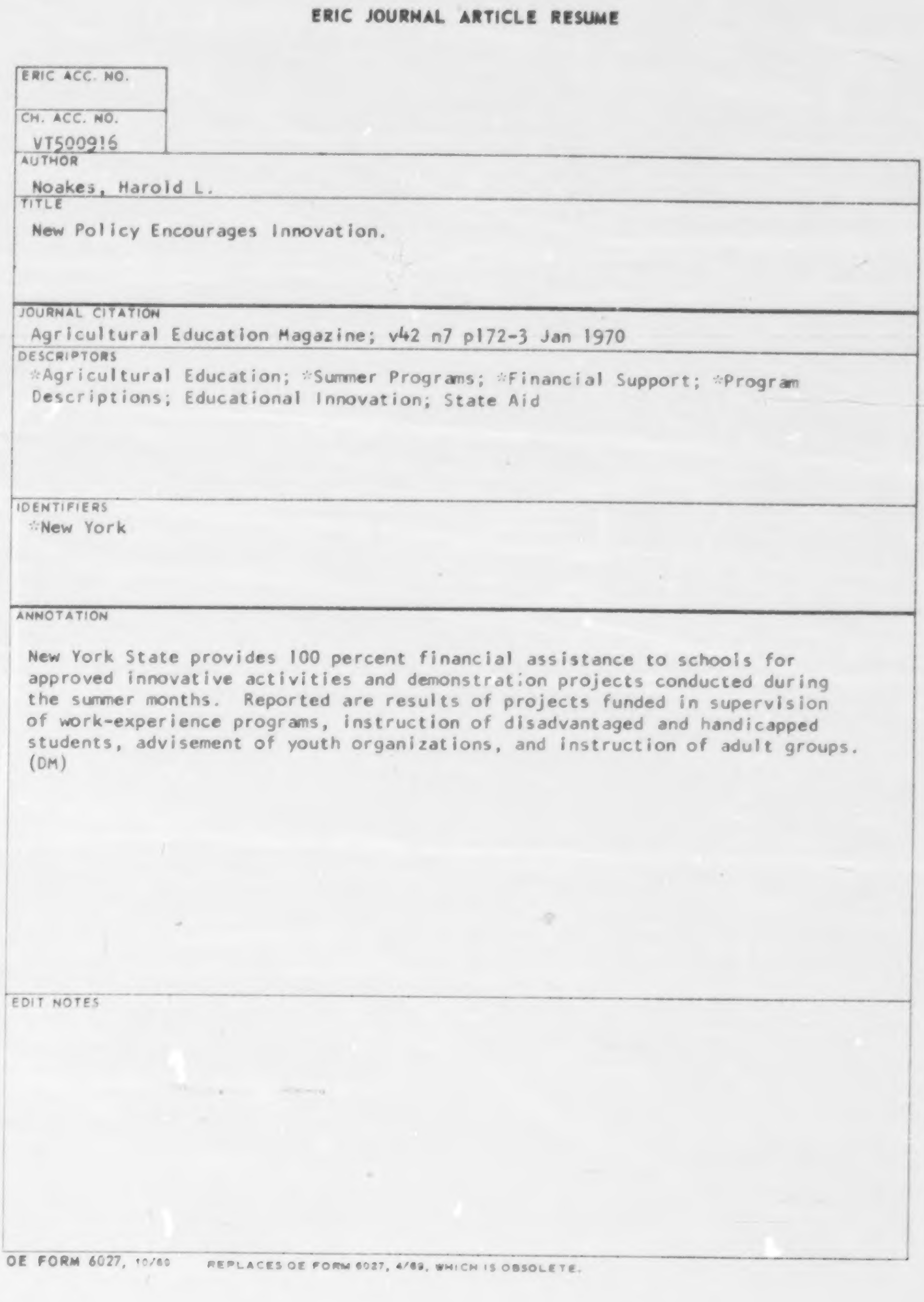


ERIC JOURNAL ARTICLE RESUME

ERIC ACC. NO.	
CH. ACC. NO.	
AUTHOR	
TITLE	
JOURNAL CITATION	
DESCRIPTORS	
IDENTIFIERS	
ANNOTATION	
EDIT NOTES	

OE FORM 6027, 10/69 REPLACES OE FORM 6027, 4/69, WHICH IS OBSOLETE.

FIGURE 9-2A
JOURNAL ARTICLE RESUME - OE FORM 6027
A. BLANK



ERIC JOURNAL ARTICLE RESUME

ERIC ACC. NO.

CH. ACC. NO.
VT500916

AUTHOR
Noakes, Harold L.

TITLE
New Policy Encourages Innovation.

JOURNAL CITATION
Agricultural Education Magazine; v42 n7 p172-3 Jan 1970

DESCRIPTORS
*Agricultural Education; *Summer Programs; *Financial Support; *Program Descriptions; Educational Innovation; State Aid

IDENTIFIERS
*New York

ANNOTATION

New York State provides 100 percent financial assistance to schools for approved innovative activities and demonstration projects conducted during the summer months. Reported are results of projects funded in supervision of work-experience programs, instruction of disadvantaged and handicapped students, advisement of youth organizations, and instruction of adult groups. (DM)

EDIT NOTES

OE FORM 6027, 10/69 REPLACES OE FORM 6027, 4/69, WHICH IS OBSOLETE.

FIGURE 9-2B
JOURNAL ARTICLE RESUME - OE FORM 6027
B. COMPLETED

Group Code (No Longer Used For Articles)

The Descriptors in the ERIC Thesaurus are grouped into 52 broad categories. During the first five years of CIJE, these categories were also used to group the journal articles announced in CIJE, so that the user scanning the journal might find like items grouped roughly together. In order to effect this grouping the cataloger of a journal article was required to assign the article, on the basis of its subject matter, to one of the 52 categories. Only one code was permitted per resume.

Beginning with the January 1974 issue of CIJE, the sequence of articles announced was changed to alphabetical by Clearinghouse prefix (corresponding to that of RIE), thus removing the descriptive cataloging requirement for a Group Code.

The Group Codes, together with their scope notes and cross-references to related groups, appear in the latest published edition of the ERIC Thesaurus.

Journal Citation

All journal titles are entered in full unabbreviated form, with the exception of initial articles, which are dropped. This rule is the same as in Section 5. It is mentioned here, however, because through 1970 (the first four years of RIE; the first two years of CIJE), periodical titles were abbreviated according to ANSI Standard Z39.5-1963 "Periodical Title Abbreviations". This was discontinued in 1971.

Edit Notes

Clearinghouses will leave this space blank. It is reserved for editorial comment by the CIJE Contractor.

9.5 ANNOTATING

Journal articles are briefly annotated rather than fully abstracted. Annotations are limited to approximately 50 words and are usually indicative in nature. Annotating is done selectively, only for those items with uninformative, non-expository titles. See Section 6.2 for a full treatment of Annotating.

9.6 INDEXING

Journal article indexing (the assignment of Descriptors and Identifiers) is performed according to the same general rules and guidelines as for RIE, with the exception that certain upper limits must be observed in CIJE processing. With respect to Descriptors, the total number (major and minor) should not exceed ten (10); the total number of major Descriptors should not exceed five (5). With respect to Identifiers, the total number should not exceed five (5); the total number of major Identifiers should not exceed one (1). The above limits on major terms are the same for CIJE as for RIE; however, the above limits on overall major and minor terms do not apply to RIE. In actual practice, even when no upper limit was specified, the average number of terms assigned to journal articles has always been considerably less for journal articles than for RIE documents. (See Section 7 for a full treatment of Indexing; depth of indexing is treated specifically on pages 187-189, 218).

9.7 VOCABULARY MAINTENANCE

New concepts, not yet represented in the ERIC Thesaurus, may be met with in the processing of journal articles just as in the processing of reports and other documents. The procedure for recommending a new term for the Thesaurus is described in Section 8 of this Manual and applies here with only minor differences.

All recommended terms (or changes to terms) require the completion of a Descriptor Justification Form (DJF). DJF's are transmitted directly to the ERIC Facility Lexicographer. In the case of RIE input, the document which inspired the term is in the normal course of events also sent to the Facility and is available to the Lexicographer for examination. In the case of journal articles, however, because the source material is not transmitted with the resumes, it is usually necessary to include a copy of the article with the DJF, as supporting documentation.

New Descriptors (DJF's) for CIJE material are processed routinely at the Facility, in the same fashion as RIE-related DJF's. All approved Descriptors are added to the Thesaurus and all disapproved Descriptors are discussed with their originators. Once a month, immediately after being updated, a copy of the ERIC Thesaurus on magnetic tape is transmitted to the CIJE Contractor, where it is used to validate all index terms being added to the data base. Any terms not found in the Thesaurus are deleted at that time (or transferred to the Identifier field).

APPENDIX A

ACRONYMS, INITIALISMS, AND ABBREVIATIONS DICTIONARY

This Dictionary attempts to restrict itself to entries that are likely to be met within the ERIC network working environment.

AA	Accession Prefix used by the ERIC Facility (for QAD's)
AC	Accession Prefix used by ERIC Clearinghouse on Adult Education (Discontinued)
ADR	Acquisitions Data Report
AIM	Abstracts of Instructional Materials (in Vocational and Technical Education)
AL	Accession Prefix used by the ERIC Clearinghouse on Linguistics (Discontinued)
ARM	Abstracts of Research Materials (in Vocational and Technical Education)
ASAP	As Soon As Possible
ASIDIC	Association of Scientific Information Dissemination Centers
ASIS	American Society for Information Science
ATS	Administrative Terminal System
B&H	Bell & Howell
BOCES	Board of Cooperative Educational Services
BR	Bureau of Research (OE-Discontinued)
BT	Broader Term
©	Copyright
CA	Current Awareness
CAPS	ERIC Clearinghouse on Counseling and Personnel Services
CCM	Crowell Collier Macmillan (changed to Macmillan Information)
CE	Accession Prefix used by the ERIC Clearinghouse in Career Education
CEC	Council for Exceptional Children
CEM	ERIC Clearinghouse on Educational Management
CERIC	Central ERIC
CFSTI	Clearinghouse for Federal Scientific and Technical Information (changed to NTIS)
CG	Accession Prefix used by the ERIC Clearinghouse on Counseling and Personnel Services
CH	Clearinghouse
CHESS	ERIC Clearinghouse for Social Studies/Social Science
CICE	ERIC Clearinghouse in Career Education
CIJE	Current Index to Journals in Education
CIP	Cataloging in Publication
CLIS	ERIC Clearinghouse on Library and Information Sciences (Discontinued)
COSATI	Committee on Scientific and Technical Information
CPI	Current Project Information

CPU..........	Central Processing Unit
CRESS........	ERIC Clearinghouse on Rural Education and Small Schools
CRT..........	Cathode Ray Tube
CS...........	Accession Prefix used by the ERIC Clearinghouse on Reading and Communication Skills
DDC..........	Defense Documentation Center
DHEW.........	Department of Health, Education, and Welfare
DIALOG.......	An On-Line Interactive Retrieval System, made available by Lockheed
DJF..........	Descriptor Justification Form
DMC..........	Data Management Center
DOS..........	Disk Operating System
EA...........	Accession Prefix used by ERIC Clearinghouse on Educational Management
EBCDIC.......	Extended Binary Coded Decimal Interchange Code
EC...........	Accession Prefix used by ERIC Clearinghouse on Handicapped and Gifted Children (formerly Clearinghouse on Exceptional Children)
ECE..........	ERIC Clearinghouse on Early Childhood Education
ECEA.........	*Exceptional Child Education Abstracts*
ED...........	(1) Educational Document; (2) ERIC Document
EDRS.........	ERIC Document Reproduction Service
EF...........	Accession Prefix used by the ERIC Clearinghouse on Educational Facilities (Discontinued)
EFAA.........	ERIC Facility Acquisitions Arrangement
EM...........	Accession Prefix used by ERIC Clearinghouse on Educational Media and Technology (Discontinued)
ERC..........	Educational Reference Center
ERIC.........	Educational Resources Information Center
FIPS.........	Federal Information Processing Standards
FL...........	Accession Prefix used by ERIC Clearinghouse on Languages and Linguistics
FR...........	Field Reader
FTS..........	Federal Telephone Service
FY...........	Fiscal Year
FYI..........	For Your Information
GANDALF......	General Alpha-Numeric Direct Access Library Facility
GAO..........	General Accounting Office
GIGO.........	Garbage In/Garbage Out
GIPSY........	General Information Processing System
GPO..........	Government Printing Office
GRA..........	*Government Reports Announcements*
HC...........	Hard Copy
HE...........	Accession Prefix used by the ERIC Clearinghouse on Higher Education
HEW..........	Health, Education, and Welfare (Department of)
IAC..........	Information Analysis Center

IAP	Information Analysis Product
IBE	International Bureau of Education
IBM	International Business Machines, Inc.
IIA	Information Industry Association
INFORMS	Iowa Network For Obtaining Resource Materials for Schools
IRCD	Information Retrieval Center on the Disadvantaged (See Directory entry for UD Clearinghouse)
IR	Accession Prefix used by the ERIC Clearinghouse on Information Resources
ISBN	International Standard Book Number
ISSN	International Standard Serial Number
JC	Accession Prefix used by the ERIC Clearinghouse for Junior Colleges
KWIC	Key Word in Context
LC	Library of Congress
LIDS	Line Image Data Set
LI	Accession Prefix used by ERIC Clearinghouse on Library and Information Sciences (Discontinued)
LIPCO	Leasco Information Products Company
LS&R	Leasco Systems & Research Corporation (now ORI)
MARC	Machine Readable Cataloging
MF	Microfiche
MI	Microfilm
MID	Macmillan Information Division
MLA or MLAA	Modern Language Association of America
MYRIAD	An Information Retrieval Software Package currently made available by Macmillan Information Company
NA	Not Applicable
NCEBOCS	Northern Colorado Educational Board of Cooperative Serivces
NCEC	National Center for Educational Communication (OE-Discontinued
NCERD	National Center for Educational Research and Development (OE-Discontinued)
NCES	National Center for Educational Statistics (USOE)
NCLIS	National Commission on Libraries and Information Science
NCR	National Cash Register Company
NEA	National Education Association
NE-C	NIE Contract Number Prefix
NE-G	NIE Grant Number Prefix
NFAIS	National Federation of Abstracting and Indexing Services
NICEM	National Information Center for Educational Media
NIE	National Institute of Education
NLM	National Library of Medicine
NMA	National Microfilm Association
NTIS	National Technical Information Service
NT	Narrower Term
OE	Office of Education
OEC	Office of Education Contract Number Prefix
OECD	Organization for Economic Cooperation and Development
OEG	Office of Education Grant Number Prefix

OP	Out of Print
ORBIT	An On-Line Interactive Retrieval System, made available by System Development Corporation
ORI	Operations Research, Inc.
OS	Operating System
PA	Program Area
PACE	(1) Projects to Advance Creativity in Education; (2) Program for Action by Citizens in Education
PAS	Publishers Alert Service
PC	Paper Copy
PERT	Program Evaluation and Review Technique
PET	Panel on Educational Terminology (Discontinued)
PGIS	Project and Grant Information System (USOE)
PPBS	Program Planning and Budgeting System
PREP	Putting Research into Educational Practice
PROBE	An Information Retrieval Software Package, made available by Indiana University
PS	Accession Prefix used by ERIC Clearinghouse on Early Childhood Education ("Pre School")
QAD	Quick Availability Document (Obsolete)
QUERY	An Information Retrieval Software Package, developed by Computer Resources Corporation
R&D	Research and Development
RC	Accession Prefix used by the ERIC Clearinghouse on Rural Education and Small Schools
RCS	ERIC Clearinghouse on Reading and Communication Skills
RE	Accession Prefix used by the ERIC Clearinghouse on Reading (Discontinued)
RIC	(1) Resources Information Center; (2) An Information Retrieval Software Package, made available by the North Dakota RIC
RIE	Research in Education
RISE	Research and Information Services for Education
RT	Related Term
SBN	Standard Book Number
SDC	System Development Corporation
SDI	Selective Dissemination of Information
SE	Accession Prefix used by ERIC Clearinghouse for Science, Mathematics, and Environmental Education
SEA	State Education Agency
SES or SeS	Socioeconomic Status
SIE	Science Information Exchange
SFR	Single Frame Resume
SMEAC	ERIC Clearinghouse for Science, Mathematics, and Environmental Education
SMERC	San Mateo Education Resources Center
SN	Scope Note

SO	Accession Prefix used by ERIC Clearinghouse for Social Studies/Social Science Education
SP	Accession Prefix used by the ERIC Clearinghouse on Teacher Education ("School Personnel")
Ss	Subjects (in an experiment)
STAR	*Scientific and Technical Aerospace Reports*
SUPDOC	Superintendent of Documents
TAB	*Technical Announcement Bulletin* (DDC)
TE	Accession Prefix used by the ERIC Clearinghouse on the Teaching of English (Discontinued)
TENL	Teaching English as a Native Language
TESOL	Teachers of English to Speakers of Other Languages
TM	Accession Prefix used by ERIC Clearinghouse on Tests, Measurement, and Evaluation
TWX	Teletypewriter Exchange
UD	Accession Prefix used by ERIC Clearinghouse on the Disadvantaged
UF	Used For
UN	United Nations
UNESCO	United Nations Educational, Scientific, and Cultural Organization
USOE	U. S. Office of Education
VEIN	Vocational Education Information Network
VIP	Vocabulary Improvement Program
VT	Accession Prefix used by ERIC Clearinghouse on Vocational and Technical Education (Discontinued)
WATS	Wide Area Telephone Service
WIRE	Wisconsin Information Retrieval for Education

APPENDIX B

GLOSSARY OF TERMS

The terms defined here are restricted to: (1) those commonly met with in the conduct of ERIC tasks; and (2) those for which definitions are not readily available in standard dictionaries.

ABSTRACT

In the ERIC system, a brief 200 word narrative description of the subject content of a document. Abstracts are tersely written, avoiding non-information-bearing words and wasteful constructions. There are several basic types; see, for example, "Indicative Abstract" and "Informative Abstract".

ACCESSION NUMBER

A number (or number with alpha prefix) assigned sequentially to incoming items (e.g., documents) to uniquely identify them. In the ERIC system, Clearinghouses assign a Clearinghouse Accession Number (e.g., TM 000 123) for temporary in-process control. Upon publication in RIE, each document is assigned a permanent system-wide accession number (e.g., ED 123 456).

ACQUISITIONS

The books, adocuments, and other such materials acquired by a library or information center, through purchase, gift, or exchange.

ACQUISITIONS ARRANGEMENT

An agreement with a document-producing organization for the automatic receipt of all or a relevant portion of their document output. The receiving organization is, in effect, placed on the distribution or mailing list of the producing organization and therefore need not make individual requests for every document of interest. Automatic acquisition arrangements tend to be more complete, expeditious and economical, than on-demand arrangements.

ACQUISITIONS DATA REPORT (ADR)

A monthly reference publication (produced by the ERIC Facility on the basis of input received from the Clearinghouses), containing a title listing of all documents acquired by the Clearinghouses, over a given period of time, for possible announcement in RIE. The period of time covered varies. Used for duplicate checking.

ADVISORY BOARD

A group of specialists, in areas pertinent to the scope of a Clearinghouse, selected by the Clearinghouse as resource persons to advise them on various matters, e.g., needed information analysis products.

ANALYTIC

A part of a larger document that is being treated and processed as if it were a separate document; the part is "analyzed out" of the parent document.

ANNOTATION

A brief (no more than 50 words) notation of subject content. In the ERIC system annotations are written for journal articles (CIJE accessions) whose titles are not sufficient to adequately convey content.

AUTHORITY LIST

A controlled list of approved forms. A Thesaurus is an authority list of indexing terms. A Source Directory is an authority list of organizational/corporate/Institutional names. In information systems, data being entered into a given field must frequently be in a form contained in an authority list before it will be permitted into the data base.

BATCH PROCESSING

A procedure in which a number of transactions to be processed are accumulated and processed together. Usually they are sorted into order and matched sequentially against affected files.

BIT

A contraction of binary digit.

BOOLEAN ALGEBRA

A system for symbolizing logical statements by operators, usually AND, OR, and NOT, from which relationships among statements can then be derived mechanically. Boolean Algebra is an algebra of classes and is considered a branch of symbolic logic. The notation permits the expression of conditional statements and statements of fact in symbolic form, and by means of prescribed operations allows arrival at valid conclusions. It is much in use in information retrieval to express the conditions of a computer search. It is named after the mathematician George Boole (1815-1864).

BROADER TERM

A Descriptor that is a member of a class that totally contains a smaller class (also represented by a Descriptor) within it. For example, BIBLIOGRAPHIES is a Broader Term to ANNOTATED BIBLIOGRAPHIES, which is referred to as a Narrower Term in this context. Broader and Narrower terms have a genus-species relationship.

BYTE

Loosely, a specified number of binary digits. Generally used to refer to the eight-bit code system used in third generation equipment (that is, the EBCDIC character set).

CAMERA-READY COPY

Art work, typed or composed text, proofs, etc., which is ready to be photographed for reproduction without further alteration.

CATHODE RAY TUBE (CRT)

A vacuum tube capable of generating an image on a surface by the effect of a stream of electrons upon phosphors on the surface. The television tube in a TV set is an example.

CENTRAL ERIC (CERIC)

The organizational unit within NIE responsible for the ERIC network, its budgeting, funding, planning, program development, monitoring, policy setting, etc. All ERIC contractors (e.g., ERIC Facility, EDRS, Clearinghouses, CIJE Contractor, etc.) report to Central ERIC.

CITATION INDEX

A form of index to the literature which lists for a given article all subsequent articles which refer to it.

CLEARINGHOUSE

A contractor within the ERIC network that takes responsibility for the acquisition and processing of materials in one of the major areas of the field of education, e.g., Higher Education, Languages, Tests, etc. ERIC Clearinghouses have traditionally been located within non-profit institutions such as universities; the exact number (now at 16) varies with the shifting needs of the educational community.

CODEN

A five-character identification for periodical titles which has been maintained by the American Society for Testing and Materials.

COLLATE

The process of merging two or more similarly sequenced files of data.

COORDINATE INDEXING

A specific method of document indexing in which, in subsequent retrieval, combinations (that is, coordinations) of previously assigned terms are looked for.

CORE JOURNAL

A journal which concentrates its articles and features in one subject area, e.g., Physics, Education, Photography, etc., as contrasted to the occasional inclusion of material of interest to that area. A core journal in Education would be the *Journal of Experimental Education*; a non-core journal in education would be *Scientific American*.

COST/EFFECTIVENESS

The standard measure of performance for evaluation of systems. It is expressed as a ratio of some measure of cost to some measure of performance.

CURRENT PROJECT INFORMATION

The name of a U. S. Office of Education publication listing and indexing on-going contract and grant efforts. Projects were assigned EP accession numbers and were handled very much as documents even though many of the data elements and indexes were necessarily different.

DATA BASE

A file of data, usually in machine-readable language.

DEBUG

To locate errors in a computer program and to correct them.

DESCRIPTIVE CATALOGING

The description of a documentary entity from a physical and bibliographic point of view, as distinguished from subject cataloging. Standard library-type cataloging picks up such data elements as author, title, publisher, number of pages, etc. and displays them on a 3x5 card or equivalent medium for patrons and users.

DESCRIPTOR

A generic word for meaningful terms or short phrases which can be chosen from a defined vocabulary for the purpose of describing/characterizing/indexing the subject content of a document.

DESCRIPTOR JUSTIFICATION FORM (DJF)

The form on which all terms being recommended for the ERIC Thesaurus must be submitted. All changes and deletions are also ultimately reduced to this form, though they may initially be recommended via the Thesaurus Term Change Notice.

DIRECT ACCESS

The process of obtaining data from a memory by going directly to its location, usually as specified by an address, without reading any other data.

DUPLICATE CHECKING

The process of determining whether a document in hand has previously entered the ERIC system. If the answer is "yes", there are three possibilities: the document has either been assigned an ED accession number (for RIE announcement), it is "in-process", or it has been rejected (discarded or retained exclusively for local files).

ERIC DOCUMENT REPRODUCTION SERVICE (EDRS)

The ERIC contractor responsible for the microfiching of all documents, the handling of standing orders (subscriptions) for microfiche, and the handling of on-demand orders for both microfiche and hard copy. Receives documents (Level I and II) and data for this purpose from the ERIC Facility. Previous EDRS contractors have been Bell & Howell, National Cash Register, and Leasco Information Products.

ERIC PROCESSING & REFERENCE FACILITY

The central computerized facility which accepts data from the ERIC Clearinghouses, edits and keys the data, and builds, maintains, and produces various products from the data base. A wide variety of supporting functions are also performed, e.g., acquisitions, lexicography, data conversion, reference, tape distribution, forms control, scheduling, etc.

ERICTAPES

The commercial "brand" name used for the ERIC data base in machine-readable form when it is sold to outside user groups.

ERICTOOLS

The commercial "brand" name used for the ERIC internal reference publications (e.g., Title Index, Source Directory) when they are sold to outside user groups.

EXHAUSTIVITY

(1) A measure of the extent to which all the distinct subjects discussed in a particular document are recognized in the indexing operation and translated into the language of the system.

(2) A measure of the extent to which a search is a comprehensive and complete statement, going after the given topic from all angles.

FALSE DROP

A retrieval or "hit" based on an unintended coordination of index terms. Synonymous with "noise".

FIELD READER

A consultant hired by USOE or NIE to read and evaluate proposals and make recommendations as to whether they should be funded. Contracts with Field Readers usually provide for a set fee per proposal read.

FLOW CHART

A graphical representation of a sequence of operations.

FUGITIVE MATERIAL

Unpublished, limited distribution material that is produced in limited quantities. Examples would be research reports, speeches, presentations, etc. Fugitive material has a tendency to disperse rapidly and to be unavailable within a relatively short time after it is generated. It varies widely in quality. If it is to be made available for the benefit of potential users (other than the small group of initial recipients) it must be captured and put under control by one of the data base systems such as ERIC.

GANTT CHART

A graphical means of showing the flow in time of processes moving from one component station (person or equipment) to another.

GROUP CODE

In the ERIC system, a 3-character numeric code representing one of 52 broad Descriptor groups or categories. Each Main Term in the ERIC Thesaurus has been assigned to one of these groups and the number representing the group appears in the Thesaurus to the right of the term itself. The "Descriptor Group Display" presents an arrangement of all Descriptors sequenced by their Group Codes.

HARD COPY

A paper copy of a document; usually a full-size (100%) reproduction of the original done via Xerox or similar process, though reduced size two-up copies may also be made.

HIT

A record (in a data base) that is retrieved in the course of a search.

IDENTIFIER

An index term for a specific entity, e.g., project, legislation, person, place, organization, coined term, acronym, equipment, etc. There are ERIC guidelines for the construction of Identifiers, but they are not formally controlled, defined, and structured as Descriptors are. Identifiers are intended to provide additional specialized indexing depth covering the multiplicity of specific entities met with in documents. They can be made to appear in the printed RIE indexes by designating them as Major index terms.

INDEXING

The process of assigning words or terms to documents in order to describe their subject content for purposes of subsequent retrieval.

INDICATIVE ABSTRACT

An abstract that summarizes the nature of or kind of information contained in a larger body of information (e.g., a document). An indicative abstract tells you what you will find if you go to the document but doesn't necessarily repeat any of the information content.

INFORMATION ANALYSIS PRODUCT (IAP)

A publication of an ERIC Clearinghouse representing a screening, sifting, culling, synthesis, integration, review, or other kind of transformation of the raw literature contained in the ERIC data base (or other sources) to a form more convenient and practical for users.

INFORMATIVE ABSTRACT

An abstract that summarizes the important results or significant facts contained in a larger body of information (e.g., a document). An informative abstract attempts to actually convey substantive information, and to some extent substitute for the entire document itself, rather than to simply indicate what one can find in the document if one goes to it.

INTERCHANGE

The name given to the irregularly-produced newsletter prepared by the ERIC Facility in connection with its "Data Base User Services" program.

LEGIBILITY

The quality of the printing in a particular document. Poor quality, that will not reproduce plainly, is often referred to as "marginal legibility". Documents that are predominantly of poor legibility should not be selected for the ERIC system. Documents with only a few poor quality pages may be processed at Level II, i.e., microfiche only, with the title page marked "Filmed From Best Available Copy". The purpose of restricting such documents to Level II is to avoid having EDRS customers paying hard copy reproduction prices for poor quality or unreadable pages.

LEVEL I, II, III

Level I - document is made available via EDRS in both microfiche and hard copy.

Level II - made available in microfiche only.

Level III - not available from EDRS; an alternate source of availability is cited in the RIE resume for the document.

LEXICOGRAPHY

The principles and practices of dictionary making. In information systems, frequently used to refer to the principles and practices of thesaurus making and indexing vocabulary development and maintenance.

LINE IMAGE DATA SET (LIDS)

The preliminary computerized file, of bibliographic data, which serves as a "scratchpad" for editors and proofreaders working on Research in Education (RIE). Data in LIDS may be corrected on a line basis (rather than a field basis. When the editors are satisfied with the correctness of the data in LIDS, it is released to the ERIC Master File and is subsequently processed by computer into an issue of RIE.

LINK

An additional symbol(e.g., "c") attached to an index term (or to a document number being posted to an index term) to designate the part of the document being indexed by the term. The purpose of a link is to avoid incorrect coordination (false drops) at retrieval by demanding that only index terms that were applied to the same section of a given document can be coordinated to produce that document as a "hit".

LINOTRON

A high-speed CRT-type photocomposition device operating off of magnetic tape input; manufactured by the Mergenthaler Linotype Company. In use at a few very high volume installations, e.g., U. S. Government Printing Office (GPO).

MAGNETIC TAPE

A device which stores data on the magnetizable surface of a long strip (typically ½ inch wide by 2400 feet long) of plastic tape. Usually data is stored and retrieved using sequential scan access.

MAJOR DESCRIPTOR

A Descriptor representing one of the major concepts contained in a document. Major Descriptors appear in the published indexes; all other Descriptors are, by definition, "Minor". In order to restrict the size of published indexes, no more than five (5) Descriptors may be designated as Major. A Descriptor (or Identifier) is Major or Minor only in the context of a particular document where it is being used and not inherently.

MATHEMATICAL MODEL

A description of something in symbolic form in such a way that it can be formally manipulated and results derived without direct reference to the thing being modelled. Any scientific theory expressed as a set of equations is a mathematical model, for example.

MICROFICHE

A 4" x 6" (105 mm x 148 mm) flat sheet of film, containing reduced images of document pages. ERIC prepares microfiche for all Level I and II documents announced in RIE, using the COSATI/NMA standard (24X reduction; 98 frames in a 7x14 grid). Microfiche may be made of silver, diazo, or vesicular film. A microfiche reader or reader-printer is required to read the page image.

MINOR DESCRIPTOR

A Descriptor assigned to a document and appearing in the printed Resume and in the machine record, but not in the published indexes of the journal. See also "Major Descriptor".

MNENOMIC

Intended to assist the memory of a person.

MONOGRAPH

A scholarly book article, treatise, pamphlet, or document on a specific and usually limited subject.

NARROWER TERM

A Descriptor that is a member of a class totally contained in a larger class also represented by a Descriptor. For example, the term ANNOTATED BIBLIOGRAPHIES is said to be a Narrower Term to BIBLIOGRAPHIES because an annotated bibliography is always a bibliography. BIBLIOGRAPHIES is then referred to as a Broader Term in this context.

OVERHEAD (ACCOUNTING)

Those costs which while necessary cannot easily be attributed directly to productive work and which must be allocated to the cost of production in order to get a true picture of costs.

PARAMETER

A quantitative characteristic which, while it may change from one situation to another, is fixed for any given situation.

POST-COORDINATED TERM

A concept that is "put together" at retrieval time (post or after the indexing process) through the coordination of two or more separate terms. For example, the concept "Italian Speakers, which does not exist as a term per se, can be sought via the post-coordination of the two separate existing terms ITALIAN and NATIVE SPEAKERS.

PRE-COORDINATED TERM

An entry in a thesaurus or vocabulary made up of more than one word and representing a complex concept consisting of two or more unit concepts. For example, the unit concepts "Teachers" and "Attitudes" can be pre-coordinated into the complex concept "Teacher Attitudes". Pre-coordination refers to the fact that the terms or concepts are already put together in the vocabulary, "pre-" the indexing or searching process. Pre-coordination is often justified on the basis of the prevalence of the complex concept in the given system.

PRINTOUT

A printed record produced by a computer. It may be in upper-case-only or in upper/lower case. The paper on which the printing is done may be of virtually any size up to and including the 11" x 15" standard size computer paper.

PROGRAMMER

A person who, analyzes a task to determine how the computer can execute it and defines the sequences of instructions which it will follow.

PROJECT NUMBER

An identifying number assigned by an organization to a project. Not to be confused with a "Report Number" (which is assigned to a specific document, of which there may be several generated on a given project), or a Contract or Grant Number (which is an identification of the legal instrument between two organizations rather than a technical project). The ERIC system catalogs only OE and NIE project numbers; others are ignored.

READER-PRINTER

A device to read microfiche or microfilm that has the additional capability of producing enlarged paper copies of individual page frames.

RECALL

The number of documents/accessions retrieved in a search that are relevant to the original question, divided by the total relevant documents/accessions in the data base/file searched. A ratio used as a measure of the extent to which the search exhausted the file of good "hits".

RELATED TERM

A term that is conceptually related in some way to another term; each term is thereby a "Related Term" of the other. Related terms may be close in meaning, may have the same Broader Term, may be related in usage or application, may have a part-whole relationship.

RELEVANCE

The number of documents/accessions retrieved in a search that are relevant to the original question divided by the total documents/accessions retrieved. A ratio used as a measure of the extent to which the search retrieved solely good "hits". Synonymous with "Precision".

REMOTE TERMINAL

A device for communication with a computer, but located at a site physically separated from the computer, usually far enough so that it is connected to the computer only through communications facilities and not through a direct cable.

REPRODUCTION RELEASE

A waiver or statement giving permission, from a document author, source, or copyright holder, to ERIC to reproduce the document. If both hard copy and microfiche reproductions may be made, the release is described as Level I; if only microfiche may be made, the release is called Level II. Reproduction releases are kept on file at the individual Clearinghouses that obtained them.

RESUMAST

The ERIC computer system's name for the master magnetic tape file of resumes (ED accessions).

RESUME

A compressed document description including cataloging, indexing, and abstracting data; a surrogate for the document itself. The term resume is used for this concept within the ERIC system; other systems describe their basic record variously as an abstract, digest, precis, brief description, announcement, record, etc.

ROLE

An additional symbol (e.g., "9") attached to an index term (or to a document number being posted to an index term) to designate the functional sense in which it was used in a particular document.

SCOPE NOTE

A brief note explaining the intended usage of a Descriptor. Used to restrict usage or to clarify a Descriptor which may have alternative meanings. Not intended to be a formal definition.

SCOPE OF INTEREST GUIDE

A reference tool which describes and defines the specific areas of responsibility of each Clearinghouse.

SEARCH

A systematic attempt to identify documents with some well defined characteristics. Applies to both manual and computer inquiries.

SEARCH STRATEGY

The logic of a particular inquiry; the demands that a search makes on its potential output. A search strategy is usually exemplified by a series of index terms arranged in groups and interconnected by logical operators, e.g., (DRINKING) AND (ALCOHOLIC BEVERAGES). A document in a data set must meet the specifications of a search strategy in order to be an output of the search. Search strategies may be "tight" and geared for retrieval of a small number of highly relevant items, or they may be "loose" and geared for comprehensive output of anything that even touches on the subject.

SINGLE FRAME RESUME (SFR)

A complete record of all data (cataloging, indexing, abstracting) collected for a document, printed on one page (i.e., frame). Usually a computer printout. The ERIC Facility provides EDRS with SFR's for each document to be filmed; these appear on the microfiche on the frame preceeding the cover or title page.

SITE VISIT

A visit to Clearinghouses by Central ERIC personnel. At least one official site visit is made annually in connection with performance review and evaluation.

SOFTWARE

In computer contexts, the programs required in order for the computer to produce desired results. Sometimes extended to include external operating procedures.

SOURCE CODE

A code representing an institution (e.g., a corporate source, a sponsoring agency, etc.). The ERIC Source Code is an 8-character alphanumeric code (3 alpha, 5 numeric). Information systems frequently make use of Source Codes because of the length of organizational names and the opportunities they provide to make small errors in spacing, punctuation, spelling, etc.

SPECIAL CHARACTER

Any of the non-alphabetic, non-numeric characters used in a particular type of font or printing device. Examples of special characters would be: $? ! # * ERIC makes use of a total of 26 special characters.

SPONSORING AGENCY

The organization which sponsored (and paid for) the work reported in a given document. To be distinguished from the organization actually doing the work.

STATE-OF-THE-ART PAPER/REVIEW

A synthesis and integration of the level of knowledge and expertise achieved by a particular scientific or technical activity, e.g., "the state-of-the-art in computer assisted instruction". Summaries of this type are periodically necessary in many fields. A complete review of the literature in a subject is often an important part of the state-of-the-art study.

SUBJECT HEADING

In traditional library practice, a member of a controlled vocabulary of alphabetic index terms. Subject Headings tend toward pre-coordination and may be made more specific by "dashed" sub-divisions, e.g., World War II--History.

SUBROUTINE

A program designed to perform a well-defined, usually limited task and capable of being used as part of other programs when that task is required.

SYSTEMS ANALYSIS

The process of determining the objectives of the system and of defining the components, operations, and procedures by which it either achieves those objectives or could achieve them more efficiently. It thus involves four steps: (1) definition of objectives; (2) analysis of processes; (3) design of alternatives; (4) evaluation.

THESAURUS

A collection of words or terms used to classify, index, store, and retrieve information in a data bank. The terms serve as labels. They usually are keywords, descriptors, or data elements found in the text or data being indexed. The thesaurus may be an alphabetized word list or it may be hierarchically structured into specialized fields, subareas, or detailed subject matter. The entries may be single words or multiple words. When the references are cited along with the thesaurus, it becomes an index.

THESAURUS TERM CHANGE NOTICE

All suggestions made for the improvement of the ERIC Thesaurus vocabulary, e.g., term changes, term deletions, term merges, etc., are recorded on this form in order to be evaluated by the Vocabulary Review Group.

TIME-SHARING

The use of a device, especially a computer, for two or more tasks during the same time interval, by interspersing processes, allocating small divisions of the total time to each task in turn.

UNIT COST

The cost of accomplishing or producing one unit of a pre-defined product, e.g., a reference response, a completed resume, a search, etc. A unit cost may be calculated in various ways, e.g., with management allocation or without, with occupancy or without, etc. When reporting unit costs, it is crucial to describe the assumptions and ground rules underlying the calculation, i.e., what categories of cost have been included in the final number?

USERS

Any persons who use the ERIC data base, microfiche, publications, or component organizations to obtain assistance (e.g., searches, references, document copies, answers, microfiche, etc.) with their needs.

ERIC CLEARINGHOUSE SCOPE OF INTEREST GUIDE

The Scope of Interest Guide defines the subject area covered by each of the ERIC Clearinghouses. This is done in the form of a concise paragraph (called "Scope of Interest"), followed by an alphabetical listing of terms applicable to a particular scope. Where needed, special explanatory or qualifying notes have been added to the paragraph. The terms are made up primarily, but not entirely, of Descriptors from the ERIC Thesaurus. They constitute, in general, the index terms most commonly used by the Clearinghouse in the indexing of documents. The Guide is used for a variety of purposes, but primarily to assist in directing documents, on the basis of their subject matter, to the appropriate Clearinghouses for further processing. It may also be used by indexers when they wish to make certain that a document is indexed from the point of view of more than one Clearinghouse.

The scope definitions and the terms have been supplied by the Clearinghouses themselves and are, basically, in their own words. They have been edited for length, standardization of format, and the elimination of ambiguity and redundancy.

A composite alphabetical list of all terms makes up the final section of the Guide and constitutes, in effect, an overall index to the Guide. It is particularly useful in bringing together terms covered by more than one Clearinghouse, as well as providing the location for specific terms.

CAREER EDUCATION (CE)

SCOPE OF INTEREST:

Career education, formal and informal at all levels, encompassing attitudes, self-knowledge, decision-making skills, general and occupational knowledge, and specific vocational and occupational skills. Adult and continuing (including non-work) education, formal and informal, including basic and literacy education, correspondence study, and all areas of inservice training, relating to occupational, family, leisure, citizen, organizational, and retirement roles. Vocational and technical education, including new sub-professional fields, occupational psychology, occupational sociology, manpower economics, employment. industrial arts, and vocational rehabilitation (for the handicapped, mentally retarded, prisoners, discharged military, etc.). Local, state, national, and international career education policy.

CE APPLICABLE TERMS AND DESCRIPTORS

ACADEMIC EDUCATION
ACCOUNTING
ADULT BASIC EDUCATION
ADULT COUNSELING
ADULT EDUCATION
ADULT EDUCATORS
ADULT VOCATIONAL EDUCATION
AGE DIFFERENCES
AGRIBUSINESS
AGRICULTURAL EDUCATION
AGRICULTURAL ENGINEERING
AGRICULTURAL OCCUPATIONS
AGRICULTURAL PRODUCTION
AIRCRAFT PILOTS
AMERICAN INDIANS
APPRENTICESHIPS
AREA VOCATIONAL SCHOOLS
ARMED FORCES
AUTO MECHANICS
BEHAVIOR CHANGE
BLUE COLLAR OCCUPATIONS
BOOKKEEPING
BUILDING TRADES
BUSINESS
BUSINESS EDUCATION
BUSINESS RESPONSIBILITY
CAREER CHANGE
CAREER CHOICE
CAREER EDUCATION
CAREER LADDERS
CAREER OPPORTUNITIES
CAREERS
CHANGING ATTITUDES
CHILD CARE OCCUPATIONS
CHILD CARE WORKERS
CHURCH SPONSORED ADULT EDUCATION
CITIZEN PARTICIPATION
CLERGYMEN
COLLEGE GRADUATES
COMMUNITY ACTION
COMMUNITY LEADERS
COMMUNITY SERVICES
CONFLICT RESOLUTION
CONSUMER EDUCATION
CONTINUING EDUCATION (ADULTS)
CONTINUING EDUCATION (PROFESSIONS)
CONTINUOUS LEARNING
COOPERATIVE EDUCATION
CORRECTIONAL EDUCATION
CORRECTIVE INSTITUTIONS
CORRESPONDENCE SCHOOLS
CORRESPONDENCE STUDY
COST EFFECTIVENESS
CREDIT COURSES
CULTURAL DIFFERENCES
CULTURALLY DISADVANTAGED
DAY CARE PROGRAMS (STAFFING)
DAYTIME PROGRAMS
DEMONSTRATION (CIVIL)
DEMONSTRATIONS (EDUCATIONAL)
DISADVANTAGED GROUPS
DISADVANTAGED YOUTH
DISCUSSION GROUPS
DISTRIBUTIVE EDUCATION
DRAFTING
EDUCATIONAL BACKGROUND
EDUCATIONAL BENEFITS
EDUCATIONAL CERTIFICATES
EDUCATIONAL INNOVATION
EDUCATIONAL LEGISLATION
EDUCATIONAL MEDIA PROGRAMS FOR ADULTS
EDUCATIONAL NEEDS
EDUCATIONAL RESEARCHERS
ELECTRIC CIRCUITS
ELECTRICITY
ELECTRONICS
EMPLOYEE ATTITUDES
EMPLOYER EMPLOYEE RELATIONSHIP
EMPLOYMENT
EMPLOYMENT OPPORTUNITIES
EMPLOYMENT PROGRAMS
EMPLOYMENT PROJECTIONS
EMPLOYMENT STATISTICS
ENGINEERS
ENLISTED MEN
ENTRY WORKERS
ENVIRONMENTAL INFLUENCES
EQUAL OPPORTUNITIES (JOBS)
EQUIVALENCY TESTS
EVALUATION METHODS/PROCEDURES/TECHNIQUES
EVENING PROGRAMS
EXPERIMENTAL PROGRAMS (VOCATIONAL AND ADULT)
EXTENSION AGENTS
FAMILY LIFE EDUCATION
FAMILY PLANNING
FARMERS
FATHERS
FEDERAL AID (REHABILITATION)
FEDERAL PROGRAMS (VOCATIONAL AND ADULT EDUCATION)
FEMALES
FLIGHT TRAINING
FOLK SCHOOLS
FOLLOWUP STUDIES
FUNCTIONAL ILLITERACY
FUNDAMENTAL AND LITERACY EDUCATION FOR ADULTS
GENERAL EDUCATION
GERONTOLOGY
GOVERNMENT EMPLOYEES
GRADUATE STUDY
GRADUATE SURVEYS
GRAPHIC ARTS
GROUP DISCUSSION
GROUP DYNAMICS
HANDICAPPED ADULT TRAINING PROGRAMS
HEADS OF HOUSEHOLDS
HEALTH OCCUPATIONS EDUCATION
HEALTH PERSONNEL
HOME ECONOMICS EDUCATION
HOMEMAKING EDUCATION
HOUSEWIVES
HUMAN RELATIONS (REHABILITATION)
HUMAN SERVICES
ILLITERACY
ILLITERATE ADULTS
INCOME
INDEPENDENT STUDY (CORRESPONDENCE STUDY FOR ADULTS)
INDIVIDUALIZED CURRICULUM (CAREER EDUCATION)
INDIVIDUALIZED INSTRUCTION (CAREER EDUCATION)
INDUSTRIAL ARTS
INDUSTRIAL ARTS EDUCATION
INDUSTRIAL TRAINING
INDUSTRY
INFORMAL ADULT EDUCATION (VOLUNTARY)
INSERVICE TEACHER EDUCATION (CAREER AND VOCATIONAL EDUCATION)
INSERVICE TRAINING IN INDUSTRY, UNIONS, ARMED FORCES
INSTITUTES (TRAINING PROGRAMS)
INSTRUCTIONAL INNOVATION (CAREER,VOCATIONAL, ADULT ED.)
INSTRUCTIONAL PROGRAM DIVISIONS
INTEGRATED CURRICULUM
INTELLIGENCE
INTERESTS
INTERPERSONAL COMPETENCE
INTERPERSONAL RELATIONSHIP
JOB ANALYSIS
JOB PLACEMENT
JOB SKILLS
JOB TRAINING
KNOWLEDGE LEVEL
LABOR EDUCATION
LABOR FORCE
LABOR SUPPLY
LABOR UNIONS
LABORATORY TRAINING
LAW ENFORCEMENT
LEADERSHIP STYLE
LEADERSHIP TRAINING
LEARNING MOTIVATION
LECTURE
LITERACY EDUCATION FOR ADULTS
LITERATURE REVIEWS (ADULT EDUCATION)
LOW ABILITY STUDENTS
MALES
MANAGEMENT DEVELOPMENT
MANPOWER DEVELOPMENT
MANPOWER ECONOMICS
MANPOWER NEEDS
MANPOWER UTILIZATION
MARITAL STATUS
MATHEMATICS INSTRUCTION (ADULT EDUCATION)
MENTAL HEALTH
METAL WORKING OCCUPATIONS
MEXICAN AMERICANS (ADULTS)
MIDDLE AGED
MIGRANT EDUCATION (ADULT)
MILITARY PERSONNEL
MILITARY TRAINING (TRAINING WHILE IN MILITARY SERVICE)
MINORITY GROUPS
MOTHERS
NEGROES
NEW CAREERS
NONCREDIT COURSES
NURSES
NURSES AIDES
NURSING
OCCUPATIONAL CHOICE
OCCUPATIONAL CLUSTERS
OCCUPATIONAL GUIDANCE
OCCUPATIONAL HOME ECONOMICS
OCCUPATIONAL INFORMATION
OCCUPATIONAL MOBILITY
OCCUPATIONAL PSYCHOLOGY
OCCUPATIONAL SOCIOLOGY
OCCUPATIONAL SURVEYS
OCCUPATIONS
OFF THE JOB TRAINING
OFFICE MACHINES
OFFICE OCCUPATIONS EDUCATION
OFFICE PRACTICE
OFFICER PERSONNEL
OLDER ADULTS

CE

ON THE JOB TRAINING
ORNAMENTAL HORTICULTURE
PARAMEDICAL OCCUPATIONS
PARENT ATTITUDES
PARENT EDUCATION
PARENTS
PART TIME JOBS
PART TIME STUDY
PARTICIPANT CHARACTERISTICS
PARTICIPANT INVOLVEMENT
PARTICIPANT SATISFACTION
PERSISTENCE
PERSONALITY
PHYSICIANS
POLICE
POLICE COMMUNITY RELATIONS
POLICE SEMINARS
POST TESTING
POWER MECHANICS
PRACTICAL NURSES
PREDICTION
PRETESTING
PRISON EDUCATION PROGRAMS
PROFESSIONAL CONTINUING EDUCATION
PROFESSIONAL PERSONNEL
PROMOTION (OCCUPATIONAL)
PROPRIETARY SCHOOLS
PSYCHOLOGICAL NEEDS
PUBLIC AFFAIRS EDUCATION (ADULTS)
PUBLIC OPINION
PUBLIC RELATIONS
PUERTO RICANS (VOCATIONAL EDUCATION)
RACIAL DIFFERENCES
READING INSTRUCTION (ADULTS)
REHABILITATION TRAINING
REINFORCEMENT (REHABILITATION)
RESIDENTIAL PROGRAMS
RETIREMENT (GENERAL)
ROLE CONFLICT
ROLE PERCEPTION
ROLE PLAYING
RURAL AREAS
RURAL EXTENSION
SAFETY EDUCATION
SCHOOL INDUSTRY RELATIONSHIP
SCIENTISTS (PARAPROFESSIONALS)
SECRETARIES
SEMINARS
SENSITIVITY TRAINING
SERVICE EDUCATION
SERVICE OCCUPATIONS
SHORT COURSES
SKILLED OCCUPATIONS
SOCIAL CHANGE
SOCIAL PROBLEMS
SOCIAL WORKERS
SOCIOECONOMIC PROGRAMS
SOCIOECONOMIC STATUS
SPECIAL DEGREE PROGRAMS
STATE AGENCIES
STATE GOVERNMENT
STATE STANDARDS
STUDENT NEEDS
STUDENT PERSONNEL SERVICES
STUDENT TEACHER RELATIONSHIP
SUBCULTURE
SUBPROFESSIONALS
SUPERVISORS (OCCUPATION)
SUPERVISORY TRAINING (OCCUPATION)
SURVEYS
TEACHING METHODS
TECHNICAL EDUCATION
TECHNICAL OCCUPATIONS
TECHNOLOGICAL ADVANCEMENT
TELEPHONE INSTRUCTION
TESTING (ADULTS)
TEXTBOOK EVALUATION
TRADE AND INDUSTRIAL EDUCATION
TRAINERS
TRANSFER OF TRAINING
TYPEWRITING
UNEMPLOYMENT
UNIVERSITIES (ADULT EDUCATION)
UNIVERSITY EXTENSION (ADULT EDUCATION)
URBAN AREAS
URBAN EXTENSION
VETERANS EDUCATION
VOCATIONAL AGRICULTURE
VOCATIONAL AGRICULTURE TEACHERS
VOCATIONAL COUNSELING
VOCATIONAL DEVELOPMENT
VOCATIONAL EDUCATION
VOCATIONAL EDUCATION TEACHERS
VOCATIONAL FOLLOWUP
VOCATIONAL INTERESTS
VOCATIONAL REHABILITATION
VOCATIONAL RETRAINING
VOCATIONAL SCHOOLS
VOLUNTARY AGENCIES
VOLUNTEER TRAINING
VOLUNTEERS
WEEKEND PROGRAMS
WELFARE RECIPIENTS
WHITE COLLAR OCCUPATIONS
WOODWORKING
WORK ATTITUDES
WORK EXPERIENCE PROGRAMS
WORK STUDY PROGRAMS
WORKSHOPS
YOUNG ADULTS
YOUTH CLUBS
YOUTH EMPLOYMENT
YOUTH OPPORTUNITY
YOUTH PROGRAMS

COUNSELING AND PERSONNEL SERVICES (CG)

SCOPE OF INTEREST:

Counselors and personnel workers, their preparation, practice and supervision at all educational levels and in all settings; the use and results of personnel procedures such as testing, interviewing, group work, and the analysis of the resultant information relating to the individual and his environment; the theoretical development of counseling and guidance; the nature of pupil, student, and adult characteristics; descriptions of educational, occupational, rehabilitation, and community settings; the types of assistance provided by personnel workers in such areas as education and career planning, parent and family consultation, teacher consultation and student activities; problems of aging; dropout identification, prevention, and rehabilitation; counseling with special population groups, e.g., prisoners, women, youth groups, minority groups, pregnant teenagers, alcoholics, and drug abusers; drug education; sex education.

Note:

Learning theory, the psychology of learning, and the measurement of cognitive functioning are of interest insofar as they must be understood and applied in a counseling and guidance context. Psychological testing is similarly of interest, but overlaps heavily with TM. Practice has been to direct documents containing actual testing instruments (or which are strongly oriented toward mathematical analysis of tests) to ERIC/TM.

CG APPLICABLE TERMS AND DESCRIPTORS

ABILITY
ABORTIONS
ACADEMIC ACHIEVEMENT
ACTIVISM
ADJUSTMENT (TO ENVIRONMENT)
ADMISSION (SCHOOL) (USE FOR K-12)
ADOPTION (IDEAS)
ADULT COUNSELING
AGE GROUPS
AGGRESSION
ALCOHOLISM
ANCILLARY SERVICES
ANXIETY
ATTENDANCE PATTERNS
ATTITUDES
BEHAVIOR CHANGE
BEHAVIOR PATTERNS
BEHAVIOR THEORIES
BEHAVIORAL COUNSELING
BEHAVIORAL DISORDERS
BELIEFS
BLACK POWER
CAREER CHOICE
CAREER PLANNING
CASE STUDIES (RELATING TO EDUCATION & COUNSELING)
CERTIFICATION
CHANGE AGENTS
CHANGING ATTITUDES
CHILD DEVELOPMENT
CIVIL RIGHTS (STUDENTS,MINORITIES,SCHOOL ROLE)
CLASSROOM ENVIRONMENT
CLASSROOM GUIDANCE PROGRAMS
COGNITIVE DEVELOPMENT
COLLEGE ATTENDANCE
COLLEGE BOUND STUDENTS
COLLEGE CHOICE
COLLEGE ENVIRONMENT
COLLEGE STUDENTS
COMMUNICATION (THOUGHT TRANSFER)
CONCEPT FORMATION
CONFIDENTIAL RECORDS
CONFIDENTIALITY
CONFLICT RESOLUTION
CONSULTATION PROGRAMS
CONTRACEPTION
COUNSELING
COUNSELING EFFECTIVENESS
COUNSELING SERVICES
COUNSELING THEORIES
COUNSELOR CERTIFICATION
COUNSELOR CHARACTERISTICS
COUNSELOR EDUCATORS
COUNSELOR FUNCTION
COUNSELOR PERFORMANCE
COUNSELOR ROLE
COUNSELOR TRAINING
COUNSELORS
CROSS CULTURAL STUDIES
CULTURALLY DISADVANTAGED
DECISION MAKING
DELINQUENT REHABILITATION
DESENSITIZATION
DEVELOPMENTAL GUIDANCE
DISADVANTAGED YOUTH
DOGMATISM
DROPOUT IDENTIFICATION
DROPOUT PREVENTION
DRUG ABUSE
DRUG EDUCATION
ECONOMICALLY DISADVANTAGED
ELEMENTARY SCHOOL COUNSELORS
ELEMENTARY SCHOOL GUIDANCE
ELEMENTARY SCHOOL STUDENTS
EMOTIONAL DEVELOPMENT (OF STUDENTS)
EMPATHY
EMPLOYMENT OPPORTUNITIES (CAREER PLANNING)
EMPLOYMENT SERVICES (COUNSELING)
ENROLLMENT OF STUDENTS (COUNSELING)
ENVIRONMENT (HUMAN ASPECTS)
ENVIRONMENTAL INFLUENCES
EVALUATION (PSYCHOLOGICAL & INTELLECTUAL)
EXTRA-CURRICULAR ACTIVITY, STUDENT
FACULTY ADVISORS
FAMILY CONSULTATIONS
FAMILY COUNSELING
FAMILY ENVIRONMENT
FEMINISM
FINANCING STUDENTS EDUCATION
FOREIGN STUDENTS (PROBLEMS & ADJUSTMENTS)
FRATERNITIES
GIFTED (CHARACTERISTICS, COUNSELING)
GOALS (GENERAL)
GROUP COUNSELING
GROUP DYNAMICS (COUNSELING)
GROUP WORK
GUIDANCE
GUIDANCE OBJECTIVES
GUIDANCE SERVICES
HEALTH SERVICES, SCHOOL
HIGH SCHOOL STUDENTS
HUMAN RELATIONS PROGRAMS (IN SCHOOL)
IDENTIFICATION (PSYCHOLOGICAL)
INCENTIVES
INDEPENDENT STUDY (MOTIVATIONAL TECHNIQUES)
INDIVIDUAL CHARACTERISTICS AND PSYCHOLOGY
INDIVIDUALIZED LEARNING (MOTIVATIONAL TECHNIQUES)
INSERVICE PROGRAMS
INSTRUCTIONAL INCENTIVES
INTELLIGENCE (DIFFERENCES, TESTS-AS RELATED TO STUDENTS)
INTERACTION PROCESS ANALYSIS
INTERPERSONAL RELATIONSHIP
INTERVIEWING
INTERVIEWS (COUNSELING, EMPLOYMENT)
JOB PLACEMENT (COUNSELING)
JUNIOR HIGH SCHOOL STUDENTS
JUVENILE DELINQUENCY
LEARNING
LEARNING THEORY/PSYCHOLOGY (BASIC; FOR INDIVIDUALS)
LEGAL PROBLEMS
LEISURE TIME
LIFE HISTORIES (PERSONAL DATA)
LOANS TO STUDENTS
MENTAL DEVELOPMENT
MENTAL HEALTH
MILITARY PERSONNEL (COUNSELING)
MOTIVATION
MOTIVATION TECHNIQUES (FOR STUDENT LEARNING)
NARCOTICS ADDICTION
NEGRO STUDENTS
NEGRO YOUTH
NONCOLLEGE PREPARATORY STUDENTS
NONPROFESSIONAL PERSONNEL
OBJECTIVES
OCCUPATIONAL ASPIRATION
OCCUPATIONAL GUIDANCE
OCCUPATIONAL INFORMATION
OCCUPATIONAL SETTINGS, ANALYSIS OF
OLDER ADULTS
OMBUDSMEN
OPERANT CONDITIONING
ORIENTATION OF STUDENTS
OVERACHIEVERS
PARENT CHILD RELATIONSHIP
PARENT COUNSELING
PARENT INFLUENCE
PARENT SCHOOL RELATIONSHIP
PEER GROUPS
PERCEPTION
PERFORMANCE FACTORS
PERSISTENCE
PERSONALITY
PERSONNEL DATA
PERSONNEL SELECTION (ADMINISTRATORS,COUNSELORS,TEACHERS)
PERSONNEL WORKERS
PHYSICAL DEVELOPMENT (LEARNING ABILITY)
PLACEMENT
POST SECONDARY EDUCATION
PRACTICUMS
PREDICTION
PREGNANCY (TEENAGERS, UNWED MOTHERS, MARRIED STUDENTS)
PRESCHOOL CHILDREN
PROBLEM SOLVING (COUNSELING)
PROFESSIONAL PERSONNEL
PROGRAM DEVELOPMENT (GUIDANCE, CAREER COUNSELING)
PSYCHOLOGICAL CHARACTERISTICS
PSYCHOLOGICAL TESTING (COUNSELING-RELATED)
PSYCHOLOGY OF LEARNING
PUPIL PERSONNEL SERVICES (USE FOR K-12)
RACIAL FACTORS
RECALL (PSYCHOLOGICAL)
RECRUITMENT
REFERRAL
REHABILITATION COUNSELING
REINFORCEMENT (COUNSELING)
RESIDENT ASSISTANTS
RISK
ROLE THEORY
RUNAWAYS
RURAL YOUTH
SAFETY EDUCATION
SCHOLARSHIP LOANS
SCHOOL COMMUNITY RELATIONSHIP
SCHOOL DROPOUTS
SCHOOL HEALTH SERVICES
SCHOOL PATROLS
SCHOOL PSYCHOLOGISTS
SCHOOL RESPONSIBILITY
SELF ACTUALIZATION
SELF CONCEPT
SENSITIVITY TRAINING
SEX DIFFERENCES
SEXUALITY
SHELTERED WORKSHOPS
SIMULATION
SMOKING PROBLEMS (HEALTH EDUCATION)
SOCIAL CHANGE
SOCIAL INFLUENCES
SOCIAL VALUES
SOCIAL WORKERS
SOCIALLY DEVIANT BEHAVIOR

CG

SOCIOECONOMIC STATUS
SOCIOMETRIC TECHNIQUES
STAFF ROLE
STUDENT ALIENATION
STUDENT CHARACTERISTICS
STUDENT COLLEGE RELATIONSHIP
STUDENT EMPLOYMENT
STUDENT ENROLLMENT
STUDENT GOVERNMENT
STUDENT LOANS
STUDENT ORIENTATION
STUDENT PERSONNEL SERVICES
STUDENT PERSONNEL SERVICES (HIGHER EDUCATION)
STUDENT SUBCULTURES
STUDENT TEACHER RELATIONSHIP
SUCCESS FACTORS
SUPERVISION
TEACHER CHARACTERISTICS
TEACHER ROLE

TERMINAL STUDENTS
THERAPEUTIC ENVIRONMENT
TRANSFER STUDENTS
TRUANCY
TUTORIAL PROGRAMS
UNDERACHIEVERS
UNWED MOTHERS
URBAN YOUTH
VALUES
VOCATIONAL COUNSELING
VOCATIONAL DEVELOPMENT
VOCATIONAL INTERESTS
VOCATIONAL REHABILITATION
WORK EXPERIENCE
WORK STUDY PROGRAMS
WORKING WOMEN
YOUTH
YOUTH PROBLEMS

c-9/c-10

DISADVANTAGED (UD)

SCOPE OF INTEREST:

Effects of disadvantaged experiences and environments, from birth onward; the academic, intellectual, and social performance of disadvantaged children and youth from grade 3 through college entrance (including the effects of self concept, motivation, and other affective influences); programs and practices which provide learning experiences designed to compensate for the special problems and/or build on the special characteristics of the disadvantaged; structural changes in the classroom, school, school system, and community, and innovative instructional practices, which directly affect the education of the disadvantaged; issues, programs, practices and materials related to economic and ethnic discrimination, segregation, desegregation, and integration in education; issues, programs, practices, and materials related to redressing the curriculum imbalance in the treatment of ethnic minority groups.

Note:

Materials relating to specific ethnic minority groups, such as Mexican-Americans, Indians, and migrants are directed to ERIC/RC.

UD APPLICABLE TERMS AND DESCRIPTORS

ABILITY GROUPING
ACADEMIC ACHIEVEMENT
ACADEMIC PERFORMANCE
ACTIVISM
ADMINISTRATOR ATTITUDES
AFRICAN AMERICAN STUDIES
BEHAVIOR CHANGE
BIRACIAL SCHOOLS
BLACK COMMUNITY
BLACK POWER
BLACK STUDIES
CHANGING ATTITUDES
CHILD DEVELOPMENT
CIVIL RIGHTS
CLASSROOM ENVIRONMENT
COGNITIVE ABILITY
COGNITIVE DEVELOPMENT
COMMUNITY CONTROL
COMPENSATORY EDUCATION
COMPENSATORY EDUCATION PROGRAMS
COURT LITIGATION
CROSS CULTURAL STUDIES
CULTURAL AWARENESS
CULTURAL BACKGROUND
CULTURAL DIFFERENCES
CULTURAL DISADVANTAGEMENT
CULTURALLY DISADVANTAGED (URBAN AREAS)
CULTURE CONFLICT
CURRICULUM DEVELOPMENT
CURRICULUM IMBALANCE
CURRICULUM PLANNING
DECENTRALIZATION
DEPRESSED AREAS (GEOGRAPHIC)
DESEGREGATION
DISADVANTAGED ADULTS
DISADVANTAGED ENVIRONMENT/EXPERIENCE
DISADVANTAGED GROUPS
DISADVANTAGED YOUTH
DISCRIMINATION
DROPOUTS
ECONOMIC DISCRIMINATION
EDUCATIONAL DISCRIMINATION
EDUCATIONAL INNOVATION
EDUCATIONALLY DISADVANGATED
ENVIRONMENTAL INFLUENCES
EQUAL EDUCATION
ETHNIC GROUPS
ETHNIC MINORITIES
ETHNIC STUDIES
FEDERAL AID
FEDERAL PROGRAMS (DISADVANTAGED)
HUMAN RELATIONS
IDENTIFICATION (PSYCHOLOGICAL)
INDIVIDUALIZED INSTRUCTION (DISADVANTAGED)
INNER CITY
INNOVATIVE INSTRUCTIONAL PRACTICES (DISADVANTAGED)
INSERVICE TEACHER EDUCATION (DISADVANTAGED)
INSTITUTES (TRAINING PROGRAMS)
INTEGRATION
INTEGRATION EFFECTS
INTEGRATION PLANS
INTERGROUP RELATIONS
INTERPERSONAL RELATIONSHIP
LEARNING DIFFICULTIES (DISADVANTAGED)
LEARNING THEORIES
LOW ACHIEVEMENT FACTORS
MANPOWER DEVELOPMENT
MINORITY GROUP CHILDREN
MINORITY GROUP TEACHERS
MINORITY GROUPS
MOTIVATION (DISADVANTAGED)
NEGRO ACHIEVEMENT
NEGRO ATTITUDES
NEGRO STEREOTYPES
NEGRO STUDENTS
NONSTANDARD DIALECTS
NUTRITION
PARENT ATTITUDES (DISADVANTAGED)
PHYSICAL DEVELOPMENT (DISADVANTAGED)
PRESCHOOL EDUCATION (DISADVANTAGED)
PUERTO RICANS
RACE RELATIONS
RACIAL ATTITUDES
RACIAL BALANCE
RACIAL DIFFERENCES
RACIAL DISCRIMINATION
RACIAL FACTORS
RACIALLY BALANCED SCHOOLS
READING INSTRUCTION (DISADVANTAGED)
REINFORCEMENT (DISADVANTAGED)
RELEVANCE (EDUCATION) (DISADVANTAGED)
SCHOOL COMMUNITY RELATIONSHIP
SCHOOL INTEGRATION
SCHOOL SEGREGATION
SEGREGATION
SELF CONCEPT (DISADVANTAGED)
SOCIALLY DISADVANTAGED
SOCIOECONOMIC BACKGROUND
SOCIOECONOMIC INFLUENCES
SOUTHERN ATTITUDES
STUDENT ATTITUDES (DISADVANTAGED)
STUDENT TEACHER RELATIONSHIP (DISADVANTAGED)
SUMMER PROGRAMS
TEACHER ATTITUDES (DISADVANTAGED)
TEST RESULTS (DISADVANTAGED)
URBAN EDUCATION

EARLY CHILDHOOD EDUCATION (PS)

SCOPE OF INTEREST:

Prenatal factors; parental behavior; the physical, psychological, social, educational, and cultural development of children from birth through the primary grades; educational theory, research, and practice related to the development of young children, including teacher preparation, educational programs and curricula related community services, groups and institutions, administration, and physical settings as well as theoretical and philosophical issues.

PS APPLICABLE TERMS AND DESCRIPTORS

ACADEMIC ACHIEVEMENT
ACHIEVEMENT NEED
ADMINISTRATIVE CHANGES
ADMINISTRATOR ATTITUDES
ADMISSION (SCHOOL) (USE FOR K-12)
AFFECTIVE BEHAVIOR
AGE DIFFERENCES
AIDES (TEACHER)
ANXIETY
AUDIOVISUAL INSTRUCTION
AUDIOVISUAL MATERIALS
AUDITORY DISCRIMINATION
AUDITORY PERCEPTION
AURALLY HANDICAPPED
BASIC SKILLS
BEHAVIOR CHANGE
BEHAVIOR DEVELOPMENT
BEHAVIOR PATTERNS
BEHAVIORAL OBJECTIVES
BEHAVIORAL SCIENCE RESEARCH
BIRTH ORDER
CHILD ABUSE
CHILD CARE
CHILD CARE CENTERS
CHILD CARE WORKERS
CHILD DEVELOPMENT
CHILD DEVELOPMENT CENTERS
CHILD PSYCHOLOGY
CHILD REARING
CHILD WELFARE
CHILDHOOD ATTITUDES
CHILDHOOD NEEDS
CHILDREN (GENERAL)
CLASSROOM OBSERVATION TECHNIQUES
COGNITIVE DEVELOPMENT
COGNITIVE PROCESSES
COMMUNICATION, VERBAL
COMMUNITY CONTROL
COMMUNITY RESOURCES
COMMUNITY SERVICE PROGRAMS
COMMUNITY SERVICES
COMPENSATORY EDUCATION
COMPENSATORY EDUCATION PROGRAMS
CONCEPT FORMATION
CREATIVITY
CULTURALLY DISADVANTAGED
CULTURE CONFLICT
CURRICULUM DESIGN (PRESCHOOL EDUCATION)
CURRICULUM DEVELOPMENT (PRESCHOOL EDUCATION)
CURRICULUM GUIDES (PRESCHOOL EDUCATION)
DAY CARE PROGRAMS
DAY-CARE SERVICES
DEMOGRAPHY
DISADVANTAGED YOUTH
DISCOVERY LEARNING
DISCRIMINATION LEARNING
EARLY CHILDHOOD
EARLY CHILDHOOD EDUCATION
EARLY EXPERIENCE
EDUCATIONAL CHANGE (PRESCHOOL EDUCATION)
EDUCATIONAL INNOVATION (PRESCHOOL EDUCATION)
EDUCATIONAL PHILOSOPHY (PRESCHOOL EDUCATION)
ELEMENTARY SCHOOL STUDENTS
EMOTIONAL DEVELOPMENT
ENVIRONMENTAL INFLUENCES
EQUIPMENT (EDUCATIONAL FACILITIES)
ETHNIC GROUPS
ETHNIC MINORITIES
ETHNIC RELATIONS
EVALUATION (PRESCHOOL EDUCATION)
EVALUATION CRITERIA
EXPERIMENTAL PROGRAMS (PRESCHOOL EDUCATION)
EYE MOVEMENTS
FAMILY (SOCIOLOGICAL UNIT)
FAMILY CHARACTERISTICS
FAMILY ENVIRONMENT
FEDERAL AID (PRESCHOOL EDUCATION)
FEDERAL PROGRAMS (PRESCHOOL EDUCATION)
FINANCIAL NEEDS
FINANCIAL SUPPORT
GROUP DYNAMICS (PRESCHOOL EDUCATION)
GROUPING (INSTRUCTIONAL PURPOSES) (PRESCHOOL EDUCATION)
HEAD START PROJECT
HOME PROGRAMS (PRESCHOOL EDUCATION)
HOME VISITS (PRESCHOOL EDUCATION)
IDENTIFICATION (PSYCHOLOGICAL)
INDIVIDUAL CHARACTERISTICS (PRESCHOOL CHILDREN)
INDIVIDUALIZED CURRICULUM (PRESCHOOL EDUCATION)
INDIVIDUALIZED INSTRUCTION (PRESCHOOL EDUCATION)
INDIVIDUALIZED PROGRAMS (PRESCHOOL EDUCATION)
INFANCY
INFANT BEHAVIOR
INFANTS
INNER CITY (PRESCHOOL EDUCATION)
INSERVICE TEACHER EDUCATION (PRESCHOOL EDUCATION)
INSTRUCTIONAL MATERIALS (PRESCHOOL EDUCATION)
INTELLECTUAL DEVELOPMENT (PRESCHOOL EDUCATION
INTERVENTION
KINDERGARTEN
KINDERGARTEN CHILDREN
LANGUAGE DEVELOPMENT (PRESCHOOL EDUCATION)
LEARNING PROCESSES
LONGITUDINAL STUDIES
MEMORY (YOUNG CHILDREN)
MENTAL DEVELOPMENT
MIGRANT CHILD EDUCATION (PRESCHOOL)
MIGRANT CHILDREN (PRESCHOOL)
MINORITY GROUPS
MOTHERS
NEGRO CHILDREN (PRESCHOOL)
NONPROFESSIONAL PERSONNEL (DAY CARE)
NURSERY SCHOOLS
OPEN PLAN SCHOOLS (PRESCHOOL EDUCATION)
OPERANT CONDITIONING (PRESCHOOL EDUCATION)
PARAPROFESSIONAL SCHOOL PERSONNEL (PRESCHOOL)
PARENT ATTITUDES (PRESCHOOL)
PARENT CHILD RELATIONSHIP
PARENT EDUCATION
PARENT PARTICIPATION
PARENT SCHOOL RELATIONSHIP
PARENT TEACHER COOPERATION
PARENTAL BEHAVIOR
PARENTS (OF PRESCHOOL)
PEER GROUPS (PRESCHOOL)
PEER TEACHING (PRESCHOOL)
PERCEPTUAL DEVELOPMENT (PRESCHOOL)
PERCEPTUAL MOTOR COORDINATION
PERSONALITY DEVELOPMENT (PRESCHOOL)
PHILOSOPHY (EDUCATIONAL)
PHYSICAL DEVELOPMENT (PRESCHOOL)
PHYSICAL EDUCATION (PRIMARY GRADES)
PICTORIAL STIMULI
PRENATAL FACTORS
PRESCHOOL CHILDREN
PRESCHOOL CURRICULUM
PRESCHOOL EDUCATION
PRESCHOOL LEARNING
PRESCHOOL PROGRAMS
PRESCHOOL TEACHERS
PRIMARY GRADES (1-3)
PROGRAM DEVELOPMENT (PRESCHOOL EDUCATION)
PROGRAM EFFECTIVENESS (PRESCHOOL EDUCATION)
PROJECT HEAD START
RACIAL ATTITUDES
RACIAL DIFFERENCES
READINESS (PRESCHOOL)
READING ABILITY (PRESCHOOL)
READING ACHIEVEMENT (PRESCHOOL)
REMEDIAL PROGRAMS (PRIMARY GRADES)
SCHOOL COMMUNITY RELATIONSHIP
SELF CONCEPT (PRESCHOOL)
SEX DIFFERENCES (PRESCHOOL)
SIBLINGS
SKILL DEVELOPMENT (PRESCHOOL)
SOCIAL BEHAVIOR (PRESCHOOL)
SOCIAL DEVELOPMENT (PRESCHOOL)
SOCIAL RELATIONS (PRESCHOOL)
SOCIALIZATION (PRESCHOOL)
SOCIALLY DISADVANTAGED (PRESCHOOL)
SOCIOECONOMIC INFLUENCES (PRESCHOOL)
SOCIOECONOMIC STATUS (PRESCHOOL)
STANDARDS (PRESCHOOL)
STATE AID (PRESCHOOL)
STATE FEDERAL AID (PRESCHOOL)
STATE LAWS (PRESCHOOL EDUCATION)
STATE PROGRAMS (PRESCHOOL)
STATE STANDARDS (PRESCHOOL EDUCATION)
STIMULATION (PRIMARY GRADES)
STUDENT ATTITUDES (PRESCHOOL)
STUDENT BEHAVIOR (PRESCHOOL)
STUDENT TEACHER RELATIONSHIP (PRESCHOOL)
SUMMER PROGRAMS (PRIMARY GRADES)
TEACHER AIDES (PRESCHOOL)
TEACHER ATTITUDES (PRESCHOOL)
TEACHER ROLE (PRESCHOOL)
TEACHING METHODS (PRESCHOOL)
TEAM TEACHING (PRESCHOOL)
TEST RESULTS (PRESCHOOL)
TEST VALIDITY (PRESCHOOL)
TESTS (PRESCHOOL)
TUTORING (PRIMARY GRADES)
UNDERACHIEVERS (PRESCHOOL)
UNWED MOTHERS (OF PRESCHOOL-AGE CHILDREN)
URBAN YOUTH (PRIMARY GRADES)
VERBAL ABILITY (PRESCHOOL)
VERBAL COMMUNICATION (PRESCHOOL)
VERBAL DEVELOPMENT (PRESCHOOL)
VISUAL DISCRIMINATION (PRESCHOOL)
VISUAL PERCEPTION (PRESCHOOL)
VOLUNTEERS (TEACHER AIDES)
WORKING WOMEN (WITH YOUNG CHILDREN)

EDUCATIONAL MANAGEMENT (EA)

SCOPE OF INTEREST:

Administration of education (theory and practice at elementary and secondary levels); management, leadership, and structure of public and private educational organizations; preservice and inservice preparation of administrators; processes of administration (finance, planning; personnel, law, etc.); educational organizations (methods and variations, change, social context). Educational facilities at all levels (sites, buildings, equipment); planning, financing, constructing, renovating, equipping, maintaining, operating, insuring, utilizing, and evaluating educational facilities; advancing educational programs via facilities and plant; influences of the physical environment on learning.

EA APPLICABLE TERMS AND DESCRIPTORS

ADMINISTRATION
ADMINISTRATIVE AGENCIES
ADMINISTRATIVE CHANGES
ADMINISTRATIVE ORGANIZATION
ADMINISTRATIVE PERSONNEL
ADMINISTRATIVE POLICY
ADMINISTRATIVE PRINCIPLES
ADMINISTRATIVE PROBLEMS
ADMINISTRATOR ATTITUDES
ADMINISTRATOR BACKGROUND
ADMINISTRATOR CHARACTERISTICS
ADMINISTRATOR EVALUATION
ADMINISTRATOR GUIDES
ADMINISTRATOR QUALIFICATIONS
ADMINISTRATOR RESPONSIBILITY
ADMINISTRATOR ROLE
ADMINISTRATOR SELECTION
ADMINISTRATORS
ADMISSIONS (GENERAL)
AIR CONDITIONING
AIR INFLATED STRUCTURES
AIR SUPPORTED STRUCTURES
ALTERNATIVE SCHOOLS
ANNUAL REPORTS (GENERAL)
ARCHITECTS
ARCHITECTURAL CHARACTER
ASSISTANT SUPERINTENDENT ROLE
ATTENDANCE OFFICERS
ATTENDANCE RECORDS
ATTRITION (STATISTICAL STUDIES)
AUTHORITARIANISM
AVERAGE DAILY ATTENDANCE
BARGAINING, COLLECTIVE
BOARD OF EDUCATION POLICY/ROLE
BOND ISSUES
BUDGETS/BUDGETING
BUILDING DESIGN
BUILDING EQUIPMENT
BUILDING IMPROVEMENT
BUILDING INNOVATION
BUILDING MATERIALS
BUILDING OBSOLESCENCE
BUILDING OPERATION
BUILDING PLANS
BUILDINGS (EDUCATIONAL FACILITIES)
BUREAUCRACY
BUS TRANSPORTATION (TO SCHOOLS)
CAPITAL OUTLAY (FOR FIXED ASSETS)
CHIEF ADMINISTRATORS
CIVIL RIGHTS
CIVIL RIGHTS LEGISLATION
CLASSROOM DESIGN
CLASSROOM FURNITURE
CLIMATE CONTROL
COLLECTIVE BARGAINING/NEGOTIATION
COMMUNITY SCHOOL DIRECTORS
CONSTRUCTION (EDUCATIONAL FACILITIES)
CONSTRUCTION COSTS
CONSTRUCTION MANAGEMENT
CONTINUOUS PROGRESS PLAN (NONGRADED SCHOOL)
CONTRACT SALARIES
CONTRACTS (TEACHER)
CONTROLLED ENVIRONMENT
COURT CASES
COURT LITIGATION
CURRICULUM DESIGN (POLICY)
CURRICULUM DEVELOPMENT (GENERAL)
CURRICULUM PLANNING
DECENTRALIZATION
DECISION MAKING
DEGREES GRANTED (STATISTICAL STUDIES)
DEMOGRAPHY
DIFFERENTIATED STAFFS
DINING FACILITIES
DISCIPLINE POLICY
DISCIPLINE PROBLEMS
DISCRIMINATORY LEGISLATION
DRUG LEGISLATION
EDUCATION (HISTORICAL STUDIES)
EDUCATION VOUCHERS
EDUCATIONAL ACCOUNTABILITY
EDUCATIONAL ADMINISTRATION
EDUCATIONAL ECONOMICS
EDUCATIONAL FACILITIES
EDUCATIONAL FINANCE
EDUCATIONAL INNOVATION
EDUCATIONAL LEGISLATION
EDUCATIONAL ORGANIZATIONS
EDUCATIONAL PARKS
EDUCATIONAL PLANNING
EDUCATIONAL POLICY
EDUCATIONAL PROGRAMS
ELEMENTARY SCHOOL SUPERVISORS
EMPLOYMENT INTERVIEWS
ENROLLMENT INFLUENCES
ENROLLMENT OF STUDENTS (GENERAL)
ENROLLMENT PROJECTIONS
ENROLLMENT RATE
ENVIRONMENT (FACILITY ASPECTS)
EQUAL FACILITIES
EQUAL PROTECTION
EQUALIZATION AID
EQUIPMENT (EDUCATIONAL FACILITIES)
EQUIPMENT UTILIZATION
EVALUATION CRITERIA
EXPENDITURE PER STUDENT
EXPENDITURES (EDUCATIONAL FINANCE)
EXTENDED SCHOOL YEAR
FACILITIES (EDUCATIONAL)
FACILITY CASE STUDIES
FACILITY EXPANSION
FACILITY GUIDELINES
FACILITY IMPROVEMENT
FACILITY INVENTORY
FACILITY REQUIREMENTS
FACILITY UTILIZATION RESEARCH
FAST TRACK SCHEDULING
FEDERAL AID
FEDERAL COURT LITIGATION
FEDERAL LAWS
FEDERAL LEGISLATION
FINANCE/FINANCING (SCHOOLS)
FINANCIAL NEEDS
FINANCIAL POLICY
FINANCIAL PROBLEMS
FINANCIAL SUPPORT
FISCAL CAPACITY
FLEXIBLE FACILITIES
FLEXIBLE PROGRESSION
FLEXIBLE SCHEDULING
FOUND SPACES
FULL STATE FUNDING
FUTURISM
GOVERNANCE
GOVERNING BOARDS
HIGH SCHOOL ORGANIZATION
HIGH SCHOOL SUPERVISORS
HISTORICAL STUDIES OF EDUCATION
HORIZONTAL ORGANIZATION
HUMANIZATION (ADMINISTRATION)
HYBRID AIR STRUCTURES
INDIVIDUAL POWER
INNOVATIONS IN EDUCATION (APPLICATION)
INPUT OUTPUT ANALYSIS
INSTITUTIONAL ADMINISTRATION
INSTITUTIONAL FACILITIES
INSTITUTIONAL SELF STUDIES
INSURANCE (EDUCATIONAL FACILITIES)
INTEGRATION METHODS
INTERIOR DESIGN
INTERMEDIATE ADMINISTRATIVE UNITS
LAW ENFORCEMENT (ADMINISTRATION)
LAWS (EDUCATION)
LEADERSHIP RESPONSIBILITY
LEADERSHIP TRAINING (ADMINISTRATION)
LEASING SCHOOL LANDS
LEGAL PROBLEMS
MAINTENANCE (EDUCATIONAL FACILITIES)
MANAGEMENT
MANAGEMENT DEVELOPMENT
MANAGEMENT SYSTEMS
MERCHANDISE INFORMATION
MERIT PAY
MIDDLE SCHOOLS
MOBILE CLASSROOMS
MODULAR BUILDING DESIGN
MODULAR SCHEDULING
NEGOTIATION (COLLECTIVE)
NEGOTIATION AGREEMENTS
NEGOTIATION IMPASSES
NEIGHBORHOOD SCHOOL POLICY
NEIGHBORHOOD SCHOOLS
NONGRADED SCHOOL (CONTINUOUS PROGRESS PLAN)
NONPUBLIC EDUCATION
NONPUBLIC SCHOOL AID
OPEN PLAN SCHOOLS
OPERATING EXPENSES
ORGANIZATIONAL CHANGE
ORGANIZATIONAL CLIMATE
ORGANIZATIONS (EDUCATIONAL)
OUTDOOR LIGHTING
PARKING FACILITIES
PAROCHIAL SCHOOL AID
PERFORMANCE CONTRACTS
PERFORMANCE CRITERIA
PERFORMANCE SPECIFICATIONS
PERSONNEL EVALUATION
PERSONNEL MANAGEMENT
PERSONNEL POLICY
PLANNING (EDUCATIONAL)
PLANNING (FACILITIES)
PNEUMATIC FORMS
POLICY FORMATION
POLITICAL INFLUENCES (EDUCATION)
POLITICAL POWER (EDUCATION)
POWER STRUCTURE (EDUCATION)
PREFABRICATION (EDUCATIONAL FACILITIES)
PREGNANT STUDENTS
PRINCIPALS
PRIVATE FINANCIAL SUPPORT

EA

PROFESSIONAL PERSONNEL
PROGRAM ADMINISTRATION
PROGRAM BUDGETING
PROGRAM COSTS
PROGRAM DESIGN
PROGRAM DEVELOPMENT
PROGRAM EFFECTIVENESS
PROGRAM GUIDES
PROGRAM IMPROVEMENT
PROGRAM PLANNING
PROGRAMS (EDUCATIONAL)
PROJECTIONS (STATISTICAL STUDIES)
PROPERTY (EDUCATIONAL FACILITIES)
PROPERTY TAXES
PUBLIC OFFICIALS
PUBLIC RELATIONS
PURCHASING
PYRAMID ORGANIZATION
QUARTER SYSTEM
REGIONAL PLANNING
REGIONAL SCHOOLS
RELOCATABLE FACILITIES
RENOVATION (EDUCATIONAL FACILITIES)
RESEARCH AND DEVELOPMENT CENTERS
RESOURCE ALLOCATIONS
SALARIES (TEACHER)
SCHEDULE MODULES
SCHEDULING
SCHOOL ACCOUNTING
SCHOOL ADMINISTRATION
SCHOOL ATTENDANCE LAWS
SCHOOL BUDGET ELECTIONS
SCHOOL BUILDINGS
SCHOOL BUSES
SCHOOL CALENDARS
SCHOOL CONSTRUCTION
SCHOOL DESIGN
SCHOOL DISTRICT AUTONOMY
SCHOOL DISTRICT SPENDING
SCHOOL EQUIPMENT
SCHOOL EXPANSION
SCHOOL FUNDS
SCHOOL IMPROVEMENT
SCHOOL LAW
SCHOOL MAINTENANCE
SCHOOL ORGANIZATION
SCHOOL PLANNING
SCHOOL PLANT
SCHOOL POLICY
SCHOOL PROPERTY
SCHOOL REDISTRICTING
SCHOOL SCHEDULES/SCHEDULING
SCHOOL SIZE
SCHOOL SPACE
SCHOOL STATISTICS
SCHOOL SUPERINTENDENTS
SCHOOL SUPERVISION
SCHOOL TAXES
SCHOOL VANDALISM
SELF-STUDIES (INSTITUTIONAL)
SITES (EDUCATIONAL FACILITIES)
SPACE NEEDS (EDUCATIONAL FACILITIES
SPACE UTILIZATION
STATE AID
STATE BOARDS OF EDUCATION
STATE DEPARTMENTS OF EDUCATION
STATE FEDERAL AID
STATE FEDERAL SUPPORT
STATE GOVERNMENT
STATE LAWS
STATE LEGISLATION
STATE SCHOOL DISTRICT RELATIONSHIP
STATE STANDARDS
STATE SUPERVISORS
STATEWIDE PLANNING
STATISTICAL STUDIES (GENERAL)
STRIKES (TEACHER)
STUDENT CENTERED CURRICULUM
STUDENT COSTS
STUDENT ENROLLMENT
STUDENT PARTICIPATION
STUDENT RECORDS
STUDENT RESPONSIBILITY
STUDENT TRANSPORTATION
SUPERINTENDENT ROLE
SUPERINTENDENTS
SUPERVISORS
SUPERVISORY ACTIVITIES
SUPERVISORY METHODS
SUPERVISORY TRAINING
SUPREME COURT LITIGATION
TAX ALLOCATION
TEACHER ADMINISTRATOR RELATIONSHIP
TEACHER ASSOCIATIONS
TEACHER CONTRACTS
TEACHER DISCIPLINE
TEACHER DISMISSAL
TEACHER EMPLOYMENT
TEACHER EVALUATION
TEACHER MILITANCY
TEACHER PROMOTION
TEACHER RECRUITMENT
TEACHER SALARIES
TEACHER STRIKES
TEACHER SUPERVISION
TEACHER UNIONS
TEAM ADMINISTRATION
TEAM TEACHING
THERMAL ENVIRONMENT
TOILET FACILITIES
TRIMESTER SCHEDULE
TRUANCY
UNIONS (TEACHER)
VERTICAL ORGANIZATION
VOUCHERS
WINDOWLESS ROOMS
YEAR ROUND SCHOOLS

HANDICAPPED AND GIFTED (EC)

SCOPE OF INTEREST:

The education of children and youth deemed exceptional: the gifted, the aurally handicapped, visually handicapped, mentally handicapped (retarded), physically handicapped, socially maladjusted, emotionally disturbed, speech impaired, learning and neurologically disabled, homebound and hospitalized, and the multihandicapped; behavioral, psychomotor, and communication disorders; cognitive functioning and learning problems of exceptional children; administration of special education programs and services; preparation and continuing education of professional and paraprofessional personnel in this field; preschool learning and development of the exceptional child; general studies on creativity; statistics and incidence data relating to exceptional children; those with IQ 0-25 and IQ 140 and above.

EC APPLICABLE TERMS AND DESCRIPTORS

ACADEMIC ACHIEVEMENT (SPECIAL EDUCATION)
ACADEMIC EDUCATION
ACADEMIC PERFORMANCE
ACADEMICALLY TALENTED CHILDREN
ACCREDITATION (INSTITUTIONS)
ACHIEVEMENT NEED
ADMINISTRATIVE CHANGES
ADMINISTRATIVE POLICY (SPECIAL EDUCATION)
ADMINISTRATIVE PROBLEMS (SPECIAL EDUCATION)
ADMINISTRATOR ATTITUDES
ADMINISTRATOR EVALUATION (SPECIAL EDUCATION)
ADMINISTRATOR QUALIFICATIONS (SPECIAL EDUCATION)
ADMINISTRATOR RESPONSIBILITY (SPECIAL EDUCATION)
ADMINISTRATOR ROLE (SPECIAL EDUCATION)
ADMINISTRATOR SELECTION (SPECIAL EDUCATION)
ADMINISTRATORS (SPECIAL EDUCATION)
ADMISSION (SCHOOL) (USE FOR K-12)
AGE DIFFERENCES
ANATOMY
ANXIETY
APHASIA
ARTICULATION (SPEECH)
AUDIOVISUAL AIDS (SPECIAL EDUCATION)
AUDIOVISUAL CENTERS (SPECIAL EDUCATION)
AUDIOVISUAL INSTRUCTION
AUDIOVISUAL MATERIALS
AUDIOVISUAL MEDIA
AUDITORY DISCRIMINATION
AUDITORY PERCEPTION
AURALLY HANDICAPPED
BEHAVIOR CHANGE
BEHAVIOR DEVELOPMENT
BEHAVIOR PATTERNS
BEHAVIORAL COUNSELING
BEHAVIORAL DISORDERS
BEHAVIORAL OBJECTIVES
BIOLOGICAL INFLUENCES
BIRTH ORDER
BLIND CHILDREN
BOARD OF EDUCATION POLICY/ROLE (SPECIAL EDUCATION)
BUILDING EQUIPMENT (SPECIAL EDUCATION)
BUS TRANSPORTATION (FOR HANDICAPPED)
CEREBRAL DOMINANCE
CHANGE AGENTS
CHANGING ATTITUDES
CHARACTER DISORDERS
CHILD ABUSE
CHILD ATTITUDES
CHILD CARE
CHILD CARE CENTERS
CHILD CARE OCCUPATIONS
CHILD DEVELOPMENT
CHILD DEVELOPMENT CENTERS
CHILD PSYCHOLOGY
CHILD REARING
CHILD WELFARE
CHILDHOOD NEEDS
CHILDREN, EXCEPTIONAL
CLASSIFICATION (LABELING)
CLASSROOM DESIGN (SPECIAL EDUCATION)
CLASSROOM ENVIRONMENT (SPECIAL EDUCATION)
CLASSROOM FURNITURE (SPECIAL EQUIPMENT)
CLASSROOM GUIDANCE PROGRAMS (SPECIAL EDUCATION)
COGNITIVE DEVELOPMENT
COGNITIVE FUNCTIONING (EXCEPTIONAL CHILDREN)
COGNITIVE PROCESSES
COMMUNICATION (THOUGHT TRANSFER)
COMMUNICATION DISORDERS
COMMUNICATION, VERBAL
COMMUNITY AND URBAN PROGRAMS (SPECIAL EDUCATION)
COMMUNITY RESOURCE VOLUNTEERS (SPECIAL EDUCATION)
COMMUNITY SERVICES
CONCEPT FORMATION
CONSULTATION PROGRAMS
CORRECTIVE READING (SPECIAL EDUCATION)
CORRELATION
COUNSELING
COUNSELING SERVICES (SPECIAL EDUCATION)
COUNSELOR PERFORMANCE (SPECIAL EDUCATION)
COUNSELOR ROLE (SPECIAL EDUCATION)
CREATIVE DRAMATICS (SPECIAL EDUCATION)
CREATIVITY
CRIPPLED CHILDREN
CURRICULUM DESIGN (SPECIAL EDUCATION)
CURRICULUM DEVELOPMENT (SPECIAL EDUCATION)
CURRICULUM GUIDES (SPECIAL EDUCATION)
CURRICULUM PLANNING (SPECIAL EDUCATION)
DAY CARE PROGRAMS (HANDICAPPED)
DAY CARE SERVICES (HANDICAPPED)
DEAF CHILDREN
DEVELOPMENTAL READING (HANDICAPPED)
DIAGNOSTIC TEACHING
DISADVANTAGED GROUPS
DISADVANTAGED YOUTH
DISCIPLINE PROBLEMS
DISCRIMINATION LEARNING
DISCRIMINATORY LEGISLATION
DRAMA/DRAMATICS (SPECIAL EDUCATION)
DROPOUT PREVENTION
DROPOUTS
DRUG ABUSE
DYSLEXIA
EARLY CHILDHOOD (HANDICAPPED AND GIFTED)
EARLY CHILDHOOD EDUCATION (SPECIAL EDUCATION)
EARLY READING (GIFTED)
EDUCATIONAL CHANGE (SPECIAL EDUCATION)
EDUCATIONAL FACILITIES (SPECIAL EDUCATION)
EDUCATIONAL IMPROVEMENT (SPECIAL EDUCATION)
EDUCATIONAL LEGISLATION
EDUCATIONAL MEDIA (SPECIAL EDUCATION)
EDUCATIONAL PHILOSOPHY (SPECIAL EDUCATION)
EDUCATIONAL PLANNING (SPECIAL EDUCATION)
EDUCATIONAL POLICY (SPECIAL EDUCATION)
EDUCATIONAL PROGRAMS (SPECIAL EDUCATION)
EDUCATIONAL PSYCHOLOGY (SPECIAL EDUCATION)
EDUCATIONAL TECHNOLOGY (SPECIAL EDUCATION)
EMOTIONALLY DISTURBED CHILDREN
EMPLOYMENT (HANDICAPPED)
EMPLOYMENT OPPORTUNITIES (HANDICAPPED)
EMPLOYMENT PROGRAMS (HANDICAPPED)
EMPLOYMENT PROJECTIONS (HANDICAPPED)
EMPLOYMENT STATISTICS
ENROLLMENT TRENDS (SPECIAL EDUCATION)
ENVIRONMENT (FACILITY ASPECTS)
ENVIRONMENT (HUMAN ASPECTS)
EQUIPMENT (EDUCATIONAL FACILITIES)
EVALUATION (SPECIAL EDUCATION)
EVALUATION METHODS/PROCEDURES/TECHNIQUES
EXCEPTIONAL CHILD EDUCATION
EXCEPTIONAL CHILD RESEARCH
EXCEPTIONAL CHILD SERVICES
EXCEPTIONAL CHILDREN
EXPERIMENTAL PROGRAMS (SPECIAL EDUCATION)
EYE MOVEMENTS
FACILITIES (EDUCATIONAL) (SPECIAL EDUCATION)
FAMILY (SOCIOLOGICAL UNIT)
FAMILY CHARACTERISTICS
FAMILY COUNSELING
FAMILY ENVIRONMENT
FEDERAL AID (SPECIAL EDUCATION)
FEDERAL PROGRAMS (SPECIAL EDUCATION)
FINANCIAL NEEDS
FINANCIAL SUPPORT
FLEXIBLE FACILITIES (SPECIAL EDUCATION)
GENETICS
GIFTED
GIFTED CHILDREN
GROUP COUNSELING (SPECIAL EDUCATION)
GROUP DYNAMICS (SPECIAL EDUCATION)
GROUPING (INSTRUCTIONAL PURPOSES) (SPECIAL EDUCATION)
GUIDANCE (SPECIAL EDUCATION)
HANDICAPPED CHILDREN
HEAD START PROJECT (HANDICAPPED)
HEARING ABNORMALITIES
HIGH INTEREST LOW VOCABULARY BOOKS
HOME PROGRAMS (HANDICAPPED)
HOME VISITS (HANDICAPPED)
HONORS CURRICULUM (GIFTED)
IDENTIFICATION (PSYCHOLOGICAL)
INDEPENDENT STUDY (GIFTED)
INDIVIDUAL CHARACTERISTICS (HANDICAPPED AND GIFTED)
INDIVIDUALIZED CURRICULUM (SPECIAL EDUCATION)
INDIVIDUALIZED INSTRUCTION (SPECIAL EDUCATION)
INDIVIDUALIZED LEARNING (MOTIVATIONAL TECHNIQUES)
INDIVIDUALIZED PROGRAMS (SPECIAL EDUCATION)
INFANCY
INFANT BEHAVIOR
INFANTS
INNER SPEECH (SUBVOCAL)
INSERVICE PROGRAMS (SPECIAL EDUCATION)
INSTRUCTIONAL MATERIALS (SPECIAL EDUCATION)
INTEGRATED CLASSROOMS
INTELLECTUAL DEVELOPMENT (SPECIAL EDUCATION)
INTELLIGENCE FACTORS (SPECIAL EDUCATION)
INTERACTION PROCESS ANALYSIS (SPECIAL EDUCATION)
INTERVENTION (EMOTIONALLY DISTURBED)
JOB PLACEMENT (HANDICAPPED)
KINESTHETIC PERCEPTION
LANGUAGE ABILITY (SPECIAL EDUCATION)
LANGUAGE DEVELOPMENT (SPECIAL EDUCATION)
LANGUAGE IMPAIRED CHILDREN
LATERAL DOMINANCE (LEARNING DISABILITIES)
LEARNING DIFFICULTIES
LEARNING DISABILITIES
LEARNING LABORATORY (SPECIAL EDUCATION)
LEARNING MOTIVATION
LEARNING PROBLEMS (CHILDREN)
LEARNING PROCESSES (SPECIAL EDUCATION)
LEARNING THEORIES (SPECIAL EDUCATION)
LISTENING
LISTENING COMPREHENSION
LISTENING SKILLS
LONGITUDINAL STUDIES
LOW ACHIEVERS
MEMORY (HANDICAPPED AND GIFTED)
MENTAL DEVELOPMENT
MENTAL HEALTH
MENTALLY HANDICAPPED
MENTALLY RETARDED CHILDREN
MOTHERS

EC

MOTIVATION (SPECIAL EDUCATION)
MOTIVATION TECHNIQUES (FOR STUDENT LEARNING)
MULTIMEDIA INSTRUCTION (SPECIAL EDUCATION)
MULTIPLY HANDICAPPED
MULTISENSORY LEARNING
NEUROLOGICALLY HANDICAPPED CHILDREN
NONVERBAL COMMUNICATION (HANDICAPPED)
NURSERY SCHOOLS (HANDICAPPED)
OPERANT CONDITIONING (SPECIAL EDUCATION)
ORAL COMMUNICATION (SPECIAL EDUCATION)
ORAL EXPRESSION (SPECIAL EDUCATION)
ORTHOPEDICALLY HANDICAPPED CHILDREN
OVERACHIEVERS (GIFTED)
PARENT ATTITUDES (HANDICAPPED AND GIFTED)
PARENT CHILD RELATIONSHIP
PARENT COUNSELING
PARENT PARTICIPATION
PARENT TEACHER COOPERATION
PARENTAL BEHAVIOR
PARENTS (OF HANDICAPPED AND GIFTED)
PERCEPTION (SPECIAL EDUCATION)
PERCEPTUAL DEVELOPMENT
PERCEPTUAL MOTOR COORDINATION
PERCEPTUALLY HANDICAPPED CHILDREN
PERFORMANCE FACTORS (HANDICAPPED AND GIFTED)
PERSONALITY
PERSONALITY DEVELOPMENT (HANDICAPPED AND GIFTED)
PHYSICAL DEVELOPMENT (HANDICAPPED)
PHYSICAL EDUCATION (HANDICAPPED)
PHYSICALLY HANDICAPPED CHILDREN
PICTORIAL STIMULI
PRENATAL FACTORS
PRESCHOOL CHILDREN (HANDICAPPED AND GIFTED)
PRESCHOOL CURRICULUM (SPECIAL EDUCATION)
PRESCHOOL EDUCATION (SPECIAL)
PRESCHOOL LEARNING (HANDICAPPED AND GIFTED)
PRESCHOOL PROGRAMS (SPECIAL EDUCATION)
PRESERVICE EDUCATION (SPECIAL)
PRIMARY GRADES (1-3) (SPECIAL EDUCATION)
PROBLEM SOLVING (SPECIAL EDUCATION)
PROGRAM DESCRIPTIONS (SPECIAL EDUCATION)
PROGRAM DEVELOPMENT (SPECIAL EDUCATION)
PROGRAM PLANNING (SPECIAL EDUCATION)
PSYCHOLINGUISTICS (SPECIAL EDUCATION)
PSYCHOLOGICAL CHARACTERISTICS (HANDICAPPED AND GIFTED)
PSYCHOLOGICAL TESTING (SPECIAL EDUCATION)
PSYCHOLOGY OF LEARNING (HANDICAPPED AND GIFTED)
PSYCHOMOTOR DISORDERS
READINESS (HANDICAPPED AND GIFTED)
READING ABILITY (HANDICAPPED AND GIFTED)
READING FAILURE (HANDICAPPED AND GIFTED)
READING READINESS (HANDICAPPED AND GIFTED)
REINFORCEMENT (HANDICAPPED AND GIFTED)
REMEDIAL PROGRAMS (SPECIAL EDUCATION)
REMEDIAL READING (HANDICAPPED)
RESIDENTIAL PROGRAMS (SPECIAL EDUCATION)
RETARDED CHILDREN
SELF ACTUALIZATION (HANDICAPPED AND GIFTED)
SELF CONCEPT (HANDICAPPED AND GIFTED)
SENSITIVITY TRAINING (SPECIAL EDUCATION)
SIBLINGS
SIGHT VOCABULARY
SOCIALLY DEVIANT BEHAVIOR (HANDICAPPED AND GIFTED)
SPECIAL EDUCATION
SPECIAL EDUCATION TEACHERS
SPECIAL HEALTH PROBLEMS
SPEECH HANDICAPPED
SPEECH IMPAIRED CHILDREN
STATE SCHOOLS (FOR THE HANDICAPPED)
TEACHER AIDES (SPECIAL EDUCATION)
TELEPHONE INSTRUCTION (SPECIAL EDUCATION)
THERAPEUTIC ENVIRONMENT (SPECIAL EDUCATION)
TUTORING (SPECIAL EDUCATION)
UNDERACHIEVERS (HANDICAPPED)
VERBAL ABILITY (HANDICAPPED)
VERBAL COMMUNICATION (HANDICAPPED)
VERBAL DEVELOPMENT (HANDICAPPED)
VISUAL DISCRIMINATION (HANDICAPPED)
VISUAL PERCEPTION (HANDICAPPED)
VISUALLY HANDICAPPED
VISUALLY IMPAIRED CHILDREN
VOCABULARY (HANDICAPPED AND GIFTED)
VOCABULARY DEVELOPMENT (HANDICAPPED AND GIFTED)
VOCATIONAL REHABILITATION (HANDICAPPED CHILDREN)
WORD RECOGNITION (HANDICAPPED AND GIFTED)
WORK STUDY PROGRAMS (HANDICAPPED)
YOUNG ADULTS (HANDICAPPED AND GIFTED)
YOUTH PROGRAMS (HANDICAPPED)

HIGHER EDUCATION (HE)

SCOPE OF INTEREST:

All aspects of higher education; student programs, conditions, and problems in colleges and universities; faculty; graduate and professional education; governance and the management of higher educational institutions including application of corporate management techniques (e.g., systems analysis, computer simulation, organization theory); legal issues; financing; planning and evaluation; facilities-structural design, management implication and impact on the education process; curriculum and instructional problems, programs, and development; university extension programs, interinstitutional arrangements and consortiums; related state and federal programs and policies; institutional research and statistics on higher education; higher education as a social institution and its relationship within society; and comparative higher education.

Note:

The Clearinghouse on Higher Education has as its interest documents dealing with any aspect of higher education with the exception of counseling and personnel services, junior and community colleges, and the education of teachers. Higher education is defined as education beyond the secondary level that leads to a 2-year or 4-year degree, masters degree, professional degree, or courses and programs designed to update the skills obtained in these degree programs. Adult, vocational, and continuing education programs would not fall within this scope.

APPLICABLE TERMS AND DESCRIPTORS

ACADEMIC ACHIEVEMENT
ACTIVISM
ADMINISTRATOR CHARACTERISTICS
ADVANCED EDUCATION
ARTICULATION (PROGRAM)
BLACK STUDENTS (COLLEGES AND UNIVERSITIES)
COLLEGE ADMISSION (HIGHER EDUCATION)
COLLEGE AND UNIVERSITY ENVIRONMENT
COLLEGE AND UNIVERSITY STUDENTS
COLLEGE BOUND STUDENTS
COLLEGE COMMUNITY RELATIONSHIPS
COLLEGE CONDITIONS AND PROBLEMS
COLLEGE CURRICULUM
COLLEGE DISSIDENTS
COLLEGE DROPOUTS
COLLEGE PREPARATION
COLLEGE STUDENT ORGANIZATIONS
COLLEGE STUDENTS
COLLEGES
COMMUNITY AND URBAN PROGRAMS
COMMUNITY SCHOOL RELATIONSHIP
COMMUNITY SERVICE PROGRAMS
COMPENSATORY PROGRAMS (COLLEGES AND UNIVERSITIES)
CONSORTIA
CONTINUING EDUCATION (FORMAL POST GRADUATE)
CORE CURRICULUM
COURSE EVALUATION
CURRICULUM GUIDES
DEGREE REQUIREMENTS
DEGREES (TITLES)
DOCTORAL THESES
DROPOUTS (COLLEGE AND UNIVERSITIES)
EDUCATIONAL ADMINISTRATION (HIGHER EDUCATION)
EDUCATIONAL FACILITIES (HIGHER EDUCATION)
ENROLLMENT TRENDS (HIGHER EDUCATION)
EVENING COLLEGES
EXPERIMENTAL COLLEGES
EXTENSION PROGRAMS
FACULTY
FEDERAL AID (HIGHER EDUCATION)
FOREIGN STUDENTS (COLLEGES AND UNIVERSITIES)
FRESHMEN
GOVERNANCE (COLLEGES AND UNIVERSITIES)
GOVERNING BOARDS (HIGHER EDUCATION)
GRADE POINT AVERAGE
GRADE PREDICTION
GRADUATE EDUCATION
GRADUATE STUDENTS
GRADUATE STUDY
HIGHER EDUCATION
HONORS CURRICULUM
HUMANITIES INSTRUCTION (COLLEGES AND UNIVERSITIES)
INDEPENDENT STUDY
INDIVIDUALIZED CURRICULUM (HIGHER EDUCATION)
INNOVATION (HIGHER EDUCATION)
INSTITUTIONAL ADMINISTRATION (HIGHER EDUCATION)
INSTITUTIONAL RESEARCH (HIGHER EDUCATION)
INSTITUTIONAL ROLE (HIGHER EDUCATION)
INSTRUCTIONAL INNOVATION (HIGHER EDUCATION)
INTEGRATED CURRICULUM (HIGHER EDUCATION)
INTEGRATION-SEGREGATION (COLLEGES AND UNIVERSITIES)
INTERDISCIPLINARY APPROACH (HIGHER EDUCATION)
INTERINSTITUTIONAL COOPERATION (HIGHER EDUCATION)
LAND GRANT UNIVERSITIES
LAW SCHOOLS
LAWYERS
LEADERSHIP TRAINING
LEGAL ISSUES (COLLEGES AND UNIVERSITIES)
LIBERAL ARTS MAJORS
MANAGEMENT DEVELOPMENT
MASTERS THESES
MEDICAL EDUCATION
NEGRO COLLEGES
NONCREDIT COURSES
OMBUDSMEN (HIGHER EDUCATION)
OVERCROWDING (COLLEGES AND UNIVERSITIES)
PART TIME STUDENTS (COLLEGES AND UNIVERSITIES)
PASS FAIL GRADING
PERSISTENCE (COLLEGE STUDENTS)
PERSONALITY TESTS (COLLEGE STUDENTS)
PERSONNEL SELECTION (HIGHER EDUCATION)
POST DOCTORAL PROGRAMS
POST GRADUATE EDUCATION
PRESIDENTS (INSTITUTIONS OF HIGHER EDUCATION)
PRETESTING (COLLEGE STUDENTS)
PRIVATE COLLEGES
PRIVATE FINANCIAL SUPPORT (HIGHER EDUCATION)
PROFESSIONAL ASSOCIATIONS
PROFESSIONAL CONTINUING EDUCATION
PROFESSIONAL EDUCATION (MEDICAL, LAW, ETC.)
PROFESSIONAL OCCUPATIONS
PROGRAM ADMINISTRATION (HIGHER EDUCATION)
PROGRAM COSTS (HIGHER EDUCATION)
PROGRAM DEVELOPMENT (HIGHER EDUCATION)
PROGRAM PLANNING (HIGHER EDUCATION)
PSYCHOLOGICAL TESTING (HIGHER EDUCATION)
RACIAL ATTITUDES
RATING SCALES
RELEVANCE (EDUCATION) (HIGHER EDUCATION)
REMEDIAL PROGRAMS (HIGHER EDUCATION)
RESIDENT STUDENTS
RESIDENTIAL COLLEGES
SABBATICAL LEAVES
SCHEDULING (HIGHER EDUCATION)
SCHOLARSHIPS
SEGREGATION-INTEGRATION (COLLEGES AND UNIVERSITIES)
SEMINARS
SENSITIVITY TRAINING (HIGHER EDUCATION)
SHORT COURSES
SOCIAL ATTITUDES (HIGHER EDUCATION)
SOCIAL VALUES (HIGHER EDUCATION)
SOCIOECONOMIC INFLUENCES (HIGHER EDUCATION)
SPECIAL DEGREE PROGRAMS
STANDARDIZED TESTS (HIGHER EDUCATION)
STANDARDS (HIGHER EDUCATION)
STATE AID (HIGHER EDUCATION)
STATE BOARDS OF EDUCATION
STATE COLLEGES
STATE FEDERAL AID (HIGHER EDUCATION)
STATE PROGRAMS (HIGHER EDUCATION)
STATE SCHOOLS (HIGHER EDUCATION)
STATE UNIVERSITIES
STATISTICAL STUDIES (HIGHER EDUCATION)
STUDENT ABILITY
STUDENT ALIENATION (COLLEGE AND UNIVERSITY)
STUDENT ATTITUDES (COLLEGE AND UNIVERSITY)
STUDENT BEHAVIOR (COLLEGE AND UNIVERSITY)
STUDENT CHARACTERISTICS (COLLEGE AND UNIVERSITY)
STUDENT COLLEGE RELATIONSHIP
STUDENT EVALUATION (HIGHER EDUCATION)
STUDENT ORGANIZATIONS
STUDENT PARTICIPATION (COLLEGE AND UNIVERSITY)
STUDENT ROLE (HIGHER EDUCATION)
STUDENTS (COLLEGE AND UNIVERSITY)
SUMMER INSTITUTES
TEACHER ADMINISTRATOR RELATIONSHIP (HIGHER EDUCATION)
TEACHER CHARACTERISTICS (HIGHER EDUCATION)
TEACHING ASSISTANTS (HIGHER EDUCATION)
TEACHING LOAD (HIGHER EDUCATION)
TENURE (HIGHER EDUCATION)
TEST INTERPRETATION
TEST VALIDITY
TESTING (HIGHER EDUCATION)
TRAINING PROGRAMS (COLLEGES AND UNIVERSITIES)
TRANSFER STUDENTS
TRUSTEES (COLLEGE AND UNIVERSITY)
TRUSTS (FINANCIAL)
TUITION GRANTS
TUTORIAL PROGRAMS (HIGHER EDUCATION)
TUTORING (HIGHER EDUCATION)
UNDERGRADUATE STUDY
UNIVERSAL EDUCATION
UNIVERSITIES
UNIVERSITY ADMINISTRATION
UNIVERSITY CONDITIONS AND PROBLEMS
UNIVERSITY EXTENSION
UNIVERSITY EXTENSION PROGRAMS
UNIVERSITY PUBLIC RELATIONS
UNIVERSITY STUDENTS
URBAN UNIVERSITIES
WOMEN TEACHERS (HIGHER EDUCATION)
WOMENS EDUCATION
WORK STUDY PROGRAMS (COLLEGES AND UNIVERSITIES)

INFORMATION RESOURCES (IR)

SCOPE OF INTEREST:

Management, standards, operation, and use of libraries and information centers, the technology to improve their operations, and the education, training, and professional activities of librarians and information specialists; information transfer process, including research, application, development, and education. Educational techniques involved in microteaching, systems analysis, games and simulation, and programmed instruction employing audiovisual teaching aids and technology, such as television, radio, computers, and films; technology in society adaptable to education, including cable television, communication satellites, microforms, and public television.

IR APPLICABLE TERMS AND DESCRIPTORS

ABSTRACTING
ABSTRACTS
ADVANCED SYSTEMS
AFFECTIVE OBJECTIVES
AIRBORNE TELEVISION
ANALOG COMPUTERS
ANIMATION
ARCHIVES
ARTIFICIAL INTELLIGENCE
AUDIENCES
AUDIO ACTIVE LABORATORIES (TECHNOLOGY)
AUDIO EQUIPMENT
AUDIO PASSIVE LABORATORIES (TECHNOLOGY)
AUDIO VIDEO LABORATORIES (TECHNOLOGY)
AUDIOVISUAL AIDS
AUDIOVISUAL AIDS (LIBRARIES OR INSTRUCTIONAL MAT.CTRS.)
AUDIOVISUAL CENTERS
AUDIOVISUAL COMMUNICATION
AUDIOVISUAL COORDINATORS
AUDIOVISUAL DIRECTORS
AUDIOVISUAL INSTRUCTION
AUDIOVISUAL MEDIA
AUDIOVISUAL PROGRAMS
AUTOINSTRUCTIONAL AIDS
AUTOINSTRUCTIONAL LABORATORIES
AUTOINSTRUCTIONAL METHODS
AUTOMATIC ABSTRACTING
AUTOMATIC INDEXING
AUTOMATION
BEHAVIORAL OBJECTIVES
BIBLIOGRAPHIC CITATIONS
BIBLIOGRAPHIC COUPLING
BIBLIOGRAPHY
BIONICS
BOOK CATALOGS
BOOK MATERIALS
BOOK THEFTS
BOOKLISTS
BOOKMOBILES
BOOKS
BRANCH LIBRARIES
BRANCHING
BROADCAST INDUSTRY
BROADCAST MEDIA
BROADCAST RECEPTION EQUIPMENT
BROADCAST TELEVISION
BULLETIN BOARDS
CABLE TELEVISION (CATV)
CARRELS
CARTOONS
CATALOGS/CATALOGING
CENSORSHIP (LIBRARY MATERIALS SELECTION, INFO. DISS.)
CENTERS OF INTEREST
CHALKBOARDS
CHARTS
CHILDRENS GAMES
CITATION INDEXES
CLASSIFICATION
CLASSROOM GAMES
CLASSROOM LIBRARIES
CLEARINGHOUSES
CLOSED CIRCUIT TELEVISION
CODIFICATION
COGNITIVE OBJECTIVES
COLLEGE LIBRARIES
COLOR PRESENTATION
COLOR TELEVISION
COMMERCIAL TELEVISION
COMMUNICATION SATELLITES
COMMUNICATIONS (TECHNOLOGY)
COMMUNITY ANTENNAS
COMPUTATIONAL LINGUISTICS (LIBRARY AND INFO. CTR. PROC.)
COMPUTER ASSISTED INSTRUCTION
COMPUTER BASED LABORATORIES
COMPUTER GRAPHICS
COMPUTER ORIENTED PROGRAMS(LIBRARY AND INFO. CTR. PROC)
COMPUTER OUTPUT MICROFILM
COMPUTER PRINT FORMATS
COMPUTER PROGRAMS (LIBRARY AND INFO. CTR. PROC.)
COMPUTER SCIENCE
COMPUTER SCIENCE EDUCATION
COMPUTER SPECIALISTS
COMPUTER STORAGE DEVICES
COMPUTER SYSTEMS
COMPUTER TECHNOLOGY
COMPUTERS
CONCORDANCES
CONTENT ANALYSIS
CONTINUOUS PROGRESS PLAN
COORDINATE INDEXES
COPYRIGHT
COUNTY LIBRARIES
COVERT RESPONSES
CRITICAL PATH METHOD
CURRENT AWARENESS SYSTEMS
CYBERNETICS
DATA
DATA ANALYSIS
DATA BASES
DATA COLLECTION
DATA PROCESSING
DECENTRALIZED LIBRARY SYSTEMS
DEPOSITORY LIBRARIES
DIAGRAMS
DIAL ACCESS INFORMATION SYSTEMS
DICTIONARIES
DICTIONARY CATALOGS
DIGITAL COMPUTERS
DISPLAY PANELS
DISPLAY SYSTEMS
DISSEMINATION OF INFORMATION
DIVIDED CATALOGS
DOCUMENT ANALYSTS
DOCUMENTALISTS
DOCUMENTARIES
DOCUMENTATION
DUBBING
ECONOMICS OF INFORMATION
ECONOMICS OF PUBLICATION
EDUCATION FOR LIBRARIES
EDUCATIONAL DIAGNOSIS
EDUCATIONAL GAMES
EDUCATIONAL MEDIA
EDUCATIONAL RADIO
EDUCATIONAL TECHNOLOGY
EDUCATIONAL TELEVISION
ELECTROMECHANICAL AIDS
ELECTRONIC DATA PROCESSING
ELECTRONIC EQUIPMENT
ELEMENTARY SCHOOL LIBRARIES
EQUIPMENT
EXHIBITS
FACSIMILE COMMUNICATION SYSTEMS
FEEDBACK
FILE ORGANIZATION AND SEARCH
FILM LIBRARIES
FILM PRODUCTION
FILM STUDY
FILMS
FILMSTRIPS
FIXED SERVICE TELEVISION
FLEXIBLE SCHEDULING
FLOW CHARTS
FOREIGN LANGUAGE FILMS
GAME THEORY
GAMES
GLOSSARIES
GOVERNMENT LIBRARIES
GRAPHIC ARTS
GRAPHS
HIERARCHICAL CLASSIFICATION
HOLOGRAPHY
ILLUSTRATIONS
INDEXES (LOCATERS)
INDEXING
INDIVIDUALIZED CURRICULUM
INDIVIDUALIZED INSTRUCTION
INDIVIDUALIZED PROGRAMS
INFORMATION CENTERS
INFORMATION DISSEMINATION
INFORMATION NEEDS
INFORMATION NETWORKS
INFORMATION PROCESSING
INFORMATION RETRIEVAL
INFORMATION SCIENCE
INFORMATION SCIENTISTS
INFORMATION SEEKING
INFORMATION SERVICES
INFORMATION SOURCES
INFORMATION SPECIALISTS
INFORMATION STORAGE
INFORMATION SYSTEMS
INFORMATION THEORY
INFORMATION UTILIZATION
INPUT OUTPUT ANALYSIS (LIBRARY AND INFO. CTR. PROC.)
INPUT OUTPUT DEVICES (LIBRARY AND INFO. CTR. PROC.)
INSTITUTIONAL LIBRARIES
INSTRUCTIONAL AIDS
INSTRUCTIONAL FILMS
INSTRUCTIONAL MATERIALS
INSTRUCTIONAL MATERIALS CENTERS
INSTRUCTIONAL MEDIA
INSTRUCTIONAL SYSTEMS
INSTRUCTIONAL TECHNOLOGY
INSTRUCTIONAL TELEVISION
INSTRUCTOR CENTERED TELEVISION
INTERLIBRARY LOANS
INTERMODE DIFFERENCES
JUNIOR COLLEGE LIBRARIES
KINESCOPE RECORDINGS
LANGUAGE LABORATORIES
LANGUAGE LABORATORY EQUIPMENT
LASERS
LAW LIBRARIES
LEARNING CHARACTERISTICS
LEGISLATIVE REFERENCE LIBRARIES
LEXICOGRAPHY
LEXICOLOGY
LEXICOLOGY (DOCUMENT PROCESSING)
LIBRARIANS

IR

LIBRARIANSHIP
LIBRARIES
LIBRARY ACQUISITIONS
LIBRARY AIDS
LIBRARY AND INFORMATION PROCESSING
LIBRARY AND INFORMATION SCIENCE PERSONNEL
LIBRARY AND INFORMATION SYSTEMS
LIBRARY ASSOCIATIONS
LIBRARY AUTOMATION
LIBRARY CIRCULATION
LIBRARY COLLECTIONS
LIBRARY COOPERATION
LIBRARY EDUCATION
LIBRARY EQUIPMENT
LIBRARY EXPENDITURES
LIBRARY EXTENSION
LIBRARY FACILITIES
LIBRARY GUIDES
LIBRARY INSTRUCTION
LIBRARY MATERIALS
LIBRARY MATERIALS SELECTION
LIBRARY NETWORKS
LIBRARY ORGANIZATIONS
LIBRARY PLANNING
LIBRARY PROGRAMS
LIBRARY REFERENCE SERVICES
LIBRARY RESEARCH
LIBRARY SCHOOLS
LIBRARY SCIENCE
LIBRARY SERVICES
LIBRARY SKILLS
LIBRARY SPECIALISTS
LIBRARY STANDARDS
LIBRARY SURVEYS
LIBRARY TECHNICAL PROCESSES
LIBRARY TECHNICIANS
LIBRARY TRAINING
LIGHTING
LINEAR PROGRAMING
LINGUISTICS (ELECTRONIC DATA PROCESSING)
LITERATURE GROWTH
LITERATURE SEARCHES
MACHINE FORMATS
MACHINE TRANSLATION
MAGNETIC TAPE CASSETTE RECORDERS
MAGNETIC TAPE CASSETTES
MAGNETIC TAPES
MAN MACHINE SYSTEMS (DOCUMENT STORAGE AND RETRIEVAL)
MANAGEMENT GAMES
MANAGEMENT SYSTEMS (TECHNOLOGY)
MANPOWER NEEDS (LIBRARIANS AND INFORMATION SCIENTISTS)
MAPS
MASS MEDIA
MASTER TAPES (AUDIO)
MATERIAL DEVELOPMENT
MECHANICAL TEACHING AIDS
MEDIA (NON-PRINT)
MEDIA RESEARCH
MEDIA SELECTION
MEDIA SPECIALISTS
MEDIA TECHNOLOGY
MEDICAL LIBRARIES
MEDICAL RECORD LIBRARIANS
MICROFICHE
MICROFILM
MICROFORM READER PRINTERS
MICROFORM READERS
MICROFORM TECHNOLOGY
MICROFORMS
MICROPHONES
MICROREPRODUCTION
MICROTEACHING
MODELS
MULTICHANNEL PROGRAMING
MULTIGRADED CLASSES
MULTIMEDIA INSTRUCTION
NATIONAL LIBRARIES
NONBOOK MATERIALS
NONGRADED CLASSES
NONGRADED SYSTEM
NONPRINT RESOURCES
NONPROFESSIONAL PERSONNEL (LIB./INFO. SCI. TECHNICIANS)
ON LINE SYSTEMS
OPAQUE PROJECTORS
OPEN CIRCUIT TELEVISION
OPTICAL SCANNERS
OPTIONAL BRANCHING
OVERHEAD PROJECTORS
OVERT RESPONSES
PERMUTED INDEXES
PHONOGRAPH RECORDS
PHONOTAPE RECORDINGS
PHOTOGRAPHIC EQUIPMENT
PHOTOGRAPHS/PHOTOGRAPH
PRINT FORMATS
PRODUCTION TECHNIQUES
PROGRAMED INSTRUCTION
PROGRAMED MATERIALS
PROGRAMED TEXTS
PROGRAMED TUTORING
PROGRAMED UNITS
PROGRAMERS
PROGRAMING (BROADCAST)
PROGRAMING LANGUAGES
PROGRAMING TECHNIQUES
PROJECT INTREX
PROJECTION EQUIPMENT
PROJECTORS
PROMPTING
PUBLIC LIBRARIES
PUBLIC TELEVISION
PUBLICATIONS AND REFERENCE MATERIALS
PUBLISHING INDUSTRY
PUZZLES
RADIO
RADIO TECHNOLOGY
REACTION TIME
READING GAMES
REALIA
RECALL (INFORMATION RETRIEVAL)
RECORDERS (TAPE)
RECORDERS (VTR)
REFERENCE MATERIALS
REGIONAL LIBRARIES
RELEVANCE (INFORMATION RETRIEVAL)
REPETITIVE FILM SHOWINGS
REPROGRAPHY
RESEARCH LIBRARIES
RESEARCH UTILIZATION (INFO. DISS. AND UTILIZATION)
RESOURCE CENTERS
RESPONSE MODE
SCHOOL LIBRARIES
SCREENS (DISPLAYS)
SEARCH STRATEGIES (INFORMATION RETRIEVAL)
SELECTIVE DISSEMINATION OF INFORMATION
SEMIOTICS
SHARED SERVICES (ELECTRONIC DATA PROCESSING)
SIGNS
SIMULATED ENVIRONMENT
SIMULATION
SIMULATORS
SINGLE CONCEPT FILMS
SKILL ANALYSIS
SLIDES
SOUND EFFECTS
SOUND FILMS
SOUND TRACKS
SPECIAL EFFECTS
SPECIAL LIBRARIES
STATE LIBRARIES
STUDENT DEVELOPED MATERIALS
SUBJECT INDEX TERMS
SYSTEM VOCABULARIES
SYSTEMS ANALYSIS
SYSTEMS APPROACH
SYSTEMS CONCEPTS
SYSTEMS DEVELOPMENT
TAPE RECORDERS/RECORDINGS
TASK ANALYSIS
TAXONOMY (INFORMATION PROCESSING AND/OR CLASSIFICATION)
TEACHER DEVELOPED MATERIALS
TEACHING MACHINES
TELECOMMUNICATION
TELECOURSES
TELEPHONE COMMUNICATION SYSTEMS
TELEVISED INSTRUCTION
TELEVISION
TELEVISION COMMERCIALS
TELEVISION CURRICULUM
TELEVISION LIGHTING
TELEVISION RESEARCH
TELEVISION SURVEYS
TELEVISION TEACHERS
TELEVISION VIEWING
TENURE (LIBRARIANS)
TERMINOLOGY (LIBRARY AND INFORMATION SCIENCE)
THESAURI
THREE DIMENSIONAL AIDS
TIME SHARING
TOYS
TRANSPARENCIES
TRUSTEES (LIBRARY)
UNGRADED PROGRAMS
UNGRADED SCHOOLS
UNION CATALOGS
UNIVERSITY LIBRARIES
USER STUDIES
VIDEO CASSETTE SYSTEMS
VIDEO EQUIPMENT
VIDEO TAPE RECORDING
VIEWING TIME
VISUAL ARTS
WORD FREQUENCY (EDP; AUTOMATIC INDEXING)

JUNIOR COLLEGES (JC)

SCOPE OF INTEREST:

Development, administration, and evaluation of public and private community and junior colleges; junior college students, staff, curricula, programs, libraries, and community services.

J. APPLICABLE TERMS AND DESCRIPTORS

ACADEMIC ACHIEVEMENT (JUNIOR COLLEGE STUDENTS)
ACCREDITATION (JUNIOR COLLEGES)
ACTIVISM (JUNIOR COLLEGES)
ADMINISTRATIVE ORGANIZATION (JUNIOR COLLEGES)
ADMINISTRATIVE PERSONNEL (JUNIOR COLLEGES)
ADMINISTRATOR ROLE (JUNIOR COLLEGES)
ADULT EDUCATION (JUNIOR COLLEGES)
ARTICULATION (PROGRAM) (BETWEEN JC'S AND OTHER INSTS.)
ASSOCIATE DEGREE
BEHAVIORAL OBJECTIVES (JUNIOR COLLEGES)
COLLEGE ADMINISTRATION (JUNIOR COLLEGES)
COLLEGE ENVIRONMENT (JUNIOR COLLEGES)
COLLEGE PLANNING (JUNIOR COLLEGES)
COLLEGE ROLE (JUNIOR COLLEGES)
COLLEGE TEACHERS (JUNIOR COLLEGES)
COMMUNITY COLLEGES
COMMUNITY SERVICES (JUNIOR COLLEGES)
COMPENSATORY EDUCATION (JUNIOR COLLEGES)
COOPERATIVE EDUCATION (JUNIOR COLLEGES)
COUNSELING (JUNIOR COLLEGES)
CURRICULUM DEVELOPMENT (JUNIOR COLLEGES)
DEVELOPMENTAL PROGRAMS (JUNIOR COLLEGES)
DISADVANTAGED YOUTH (JUNIOR COLLEGES)
DROPOUT RESEARCH (JUNIOR COLLEGES)
EDUCATIONAL ACCOUNTABILITY (JUNIOR COLLEGES)
EDUCATIONAL FACILITIES (JUNIOR COLLEGES)
EDUCATIONAL FINANCE (JUNIOR COLLEGES)
EDUCATIONAL INNOVATION (JUNIOR COLLEGES)
EDUCATIONAL LEGISLATION (JUNIOR COLLEGES)
EDUCATIONAL NEEDS (JUNIOR COLLEGE STUDENTS)
EDUCATIONAL OBJECTIVES (JUNIOR COLLEGES)
EDUCATIONAL PHILOSOPHY (JUNIOR COLLEGES)
EDUCATIONAL PLANNING (JUNIOR COLLEGES)
ENROLLMENT TRENDS (JUNIOR COLLEGES)
EXPERIMENTAL PROGRAMS (JUNIOR COLLEGES)
FINANCIAL SUPPORT (JUNIOR COLLEGE STUDENTS)
FOLLOWUP STUDIES (JUNIOR COLLEGE STUDENTS)
GENERAL EDUCATION (JUNIOR COLLEGES)
GOVERNANCE (JUNIOR COLLEGES)
INDIVIDUALIZED INSTRUCTION (JUNIOR COLLEGES)
INNOVATION (JUNIOR COLLEGES)
INSTITUTIONAL RESEARCH (JUNIOR COLLEGES)
INSTRUCTIONAL IMPROVEMENT (JUNIOR COLLEGES)
INSTRUCTIONAL INNOVATION (JUNIOR COLLEGES)
INSTRUCTIONAL MEDIA (JUNIOR COLLEGES)
INTERINSTITUTIONAL COOPERATION (JC'S AND OTHER INSTS.)
JUNIOR COLLEGE STUDENTS
JUNIOR COLLEGES
MASTER PLANS (JUNIOR COLLEGES)
NEGRO STUDENTS (JUNIOR COLLEGES)
PERSISTENCE (JUNIOR COLLEGE STUDENTS)
POST SECONDARY EDUCATION
PROGRAM BUDGETING (JUNIOR COLLEGES)
PROGRAM DEVELOPMENT (JUNIOR COLLEGES)
PROGRAM PLANNING (JUNIOR COLLEGES)
REMEDIAL PROGRAMS (JUNIOR COLLEGES)
SCHOOL COMMUNITY RELATIONSHIP (JUNIOR COLLEGES)
STATE LEGISLATION (JUNIOR COLLEGES)
STATEWIDE PLANNING (JUNIOR COLLEGES)
STUDENT ATTITUDES (JUNIOR COLLEGE)
STUDENT CHARACTERISTICS (JUNIOR COLLEGE)
STUDENT COLLEGE RELATIONSHIP (JUNIOR COLLEGES)
STUDENT NEEDS (JUNIOR COLLEGE STUDENTS)
STUDENT OPINION (JUNIOR COLLEGE STUDENTS)
STUDENT PARTICIPATION (NON-COURSE-RELATED ACTIVITIES)
STUDENT PERSONNEL SERVICES (JUNIOR COLLEGES)
STUDENT TEACHER RELATIONSHIP (JUNIOR COLLEGES)
SUBPROFESSIONALS
SYSTEMS APPROACH (TO ADMIN. OR INSTRUCTION IN JC'S)
TEACHER ATTITUDES (JUNIOR COLLEGE TEACHERS)
TEACHING METHODS (JUNIOR COLLEGES)
TRANSFER PROGRAMS (JUNIOR COLLEGES)
TRANSFER STUDENTS
VOCATIONAL EDUCATION (JUNIOR COLLEGES)
WORK STUDY PROGRAMS (OFFERED IN JUNIOR COLLEGES)

LANGUAGES AND LINGUISTICS (FL)

SCOPE OF INTEREST:

Languages and language sciences; theoretical and applied linguistics; all areas of foreign language and linguistics instruction, pedagogy, and methodology; psychology of language learning; cultural and intercultural context of languages; application of linguistics and bilingualism in language teaching; psycho-linguistics; study abroad and international exchanges; related curriculum developments and problems; teacher training and qualifications specific to the teaching of foreign languages; commonly and uncommonly taught languages including English as a second language for speakers of other languages.

FL APPLICABLE TERMS AND DESCRIPTORS

ACOUSTIC PHONETICS
AFRICAN LANGUAGES
APPLIED LINGUISTICS
ARABIC
ARTICULATION (SPEECH)
AUDIO ACTIVE LABORATORIES
AUDIO PASSIVE LABORATORIES
AUDIO VIDEO LABORATORIES
AUDIOLINGUAL METHODS
AUDIOVISUAL MATERIALS
BASIC SKILLS (FOREIGN LANGUAGE)
BEGINNING READING (FOREIGN LANGUAGES)
BILINGUAL EDUCATION
BILINGUALISM
CHINESE
CLASSICAL LANGUAGES
COMMUNICATION (THOUGHT TRANSFER)
COMMUNICATION, VERBAL (SECOND LANGUAGES)
COMPOSITION (LITERARY, IN FOREIGN LANGUAGE)
COMPOSITION SKILLS (LITERARY, IN FOREIGN LANGUAGE)
COMPUTATIONAL LINGUISTICS
CONSONANTS
CONTRASTIVE LINGUISTICS
CULTURAL CONTEXT
CULTURAL EDUCATION
CURRICULUM DEVELOPMENT (LANGUAGE TEACHING)
DEEP STRUCTURE
DESCRIPTIVE LINGUISTICS
DIACHRONIC LINGUISTICS (FOREIGN LANGUAGES)
DIALECT INTERFERENCE
DIALECT STUDIES
DIALECTS
DISTINCTIVE FEATURES
DROPOUTS (STUDENTS WHO DISCONTINUE LANGUAGE STUDY)
ENGLISH AS A SECOND (OR FOREIGN) LANGUAGE
ETHNIC GROUPS (BILINGUAL EDUCATION,INCL. ENGLISH)
ETHNIC MINORITIES (BILINGUAL EDUCATION,INCL. ENGLISH)
ETHNOLINGUISTICS
EXCHANGE PROGRAMS
FLES
FOREIGN LANGUAGE DOCUMENTS
FOREIGN LANGUAGES
FOREIGN STUDENTS (INTERNATIONAL EXCHANGES)
FORM CLASSES (LANGUAGE)
FRENCH
GERMAN
GRAMMAR
GRAMMAR TRANSLATION METHOD
GREEK
HINDI
IMMIGRANTS (NONSPEAKERS OF ENGLISH)
INDO EUROPEAN LANGUAGES
INTERFERENCE (LANGUAGE LEARNING)
INTERNATIONAL EDUCATION (TEACHING LANGUAGES ABROAD)
INTERNATIONAL EXCHANGES
INTERNATIONAL STUDIES (INVOLVING FOREIGN LANGUAGES)
ITALIAN
JAPANESE
LANGUAGE ABILITY (ACHIEVEMENT IN FOREIGN LANGUAGES)
LANGUAGE CLASSIFICATION
LANGUAGE DEVELOPMENT
LANGUAGE ENROLLMENT
LANGUAGE INSTRUCTION (FOREIGN LANGUAGES)
LANGUAGE LABORATORIES
LANGUAGE PATTERNS
LANGUAGE PROGRAMS
LANGUAGE SCIENCES
LANGUAGE STYLES
LANGUAGE TESTS
LANGUAGE TYPOLOGY
LANGUAGE UNIVERSALS
LANGUAGE USAGE
LATIN
LEXICOLOGY (RESEARCH: FOREIGN LANGUAGE DICTIONARIES)
LINGUISTIC COMPETENCE
LINGUISTIC THEORY
LINGUISTICS
LISTENING COMPREHENSION
LITERATURE APPRECIATION (FOREIGN LANGUAGE READING)
MEXICAN AMERICANS (BILINGUAL EDUCATION PROGRAMS)
MODERN LANGUAGES
MORPHOLOGY (LANGUAGES)
NATIONAL DEFENSE EDUCATION ACT INSTITUTES
NONSTANDARD DIALECTS (INNER CITY DIALECTS, INCL. ENGLISH)
NONVERBAL COMMUNICATION
PARALINGUISTICS
PATTERN DRILLS (LANGUAGE)
PHONEMIC ALPHABETS
PHONEMICS
PHONETICS
PROGRAMED INSTRUCTION AND LANGUAGES
PSYCHOLINGUISTICS
READING (FOREIGN LANGUAGES)
READING COMPREHENSION (FOREIGN LANGUAGES)
REGIONAL DIALECTS (INNER CITY DIALECTS,INCL. ENGLISH)
ROMANCE LANGUAGES
RUSSIAN
SECOND LANGUAGE LEARNING
SEMANTICS
SEMIOTICS
SEMITIC LANGUAGES
SINO TIBETAN LANGUAGES
SLAVIC LANGUAGES
SOCIOLINGUISTICS
SPANISH
SPANISH SPEAKING (BILINGUAL EDUCATION OF MINORITIES)
SPEAKING
STRUCTURAL GRAMMAR
STRUCTURAL LINGUISTICS
STUDENT EXCHANGE PROGRAMS
STUDY ABROAD
SURFACE STRUCTURE
SWAHILI
SYLLABLES
SYNTAX
TEACHING METHODS (FOREIGN LANGUAGES)
TRADITIONAL GRAMMAR
TRANSFORMATION GENERATIVE GRAMMAR
TRANSFORMATIONS (LANGUAGE)
UNCOMMONLY TAUGHT LANGUAGES
UNWRITTEN LANGUAGE
VERBAL ABILITY
VOCABULARY (SECOND LANGUAGE)
VOCABULARY DEVELOPMENT (SECOND LANGUAGE)
VOWELS
WORD FREQUENCY
WRITING SKILLS (FOREIGN LANGUAGE)

READING AND COMMUNICATION SKILLS (CS)

SCOPE OF INTEREST:

All aspects of reading---cognitive, affective, and psychomotor---and professional training, research, methodology, and organization of reading instruction, including identification and diagnosis of reading ability and reading improvement. Teaching and learning English as a native language both as a symbol system and for speaking, listening, writing and reading literature. Educational journalism including learning and teaching of the creation, analysis, interpretation, and evaluation of journalism in print, electronic media, graphics, advertising, and public relations and training teachers at all levels. Speech sciences, including radio, TV, film, forensics, interpersonal and small group interaction, theater, oral interpretation, public speaking, rhetoric, and communication theory.

CS APPLICABLE TERMS AND DESCRIPTORS

ACADEMIC ACHIEVEMENT (READING)
ACTING
ADULT READING PROGRAMS
AMERICAN LITERATURE
APHASIA (READING)
ATTITUDES (AS RELATED TO SPEECH)
AUDIOVISUAL AIDS (RE: TEACHING COMMUNICATION SKILLS)
AUDITORY DISCRIMINATION
AUDITORY PERCEPTION
BASIC READING
BASIC SKILLS (READING,WRITING,SPEAKING)
BEGINNING READING
BILINGUAL EDUCATION (RE: TESOL)
BILINGUALISM (RE: TESOL)
BIOGRAPHIES
CENSORSHIP
CEREBRAL DOMINANCE
CHARACTER RECOGNITION
CHILD LANGUAGE
CHILDRENS BOOKS
CHORAL SPEAKING
CLOZE PROCEDURE
COGNITIVE DEVELOPMENT
COGNITIVE PROCESSES
COLOR
COMMUNICATION (THOUGHT TRANSFER IN INTERPERSONAL COMMUNICATION)
COMMUNICATION, VERBAL
COMPOSITION
COMPOSITION (LITERARY)
COMPOSITION SKILLS (LITERARY)
CONTENT READING
CONTEXT CLUES
CORRECTIVE READING
CREATIVE DRAMATICS
CREATIVE THINKING
CREATIVE WRITING
CRITICAL READING
CRITICAL THINKING
CULTURALLY DISADVANTAGED (RE: TENL)
CURRICULUM DESIGN (LANGUAGE)
CURRICULUM DEVELOPMENT (LANGUAGE)
CURRICULUM EVALUATION (LANGUAGE)
CURRICULUM GUIDES (ENGLISH LANGUAGE)
DECODING (READING)
DEEP STRUCTURE (ENGLISH)
DESCRIPTIVE WRITING
DEVELOPMENTAL READING
DIACHRONIC LINGUISTICS
DIAGNOSTIC TEACHING
DIALECT STUDIES (COMMUNICATION)
DIALECTS (RE: TEACHING ENGLISH AND READING)
DIRECTED READING ACTIVITY
DISCRIMINATION LEARNING
DISCUSSION GROUPS (SPEECH)
DRAMA/DRAMATICS
DYSLEXIA
EARLY READING
ELECTIVE READING
EMPLOYER EMPLOYEE RELATIONSHIP (COMMUNICATION)
ENGLISH
ENGLISH CURRICULUM (ALL LEVELS)
ENGLISH EDUCATION/INSTRUCTION
ENGLISH LITERATURE
ENGLISH MAJOR
ENGLISH PROGRAMS
ENGLISH SKILLS
ENGLISH TEACHER PREPARATION
ERROR PATTERNS
EXPOSITORY WRITING
EYE FIXATIONS
EYE MOVEMENTS (READING)
FICTION
FILM PRODUCTION
FILM STUDY
FILMS (COMMUNICATION)
FOLKLORE BOOKS
GRAMMAR
GRAPHEMES
GROUP DYNAMICS (COMMUNICATION)
GROUP READING
GROUP RELATIONS
GROUP STRUCTURE (COMMUNICATION)
GROUPING (INSTRUCTIONAL PURPOSES)
HANDWRITING SKILLS
HEARING
HIGH INTEREST LOW VOCABULARY BOOKS
HUMAN RELATIONS (COMMUNICATION)
HUMANITIES (LITERATURE AND COMMUNICATION)
HUMANITIES INSTRUCTION (LITERATURE AND COMMUNICATION)
INDEPENDENT READING
INDIVIDUAL DEVELOPMENT (COMMUNICATIONS)
INDIVIDUAL POWER (SPEECH)
INDIVIDUAL READING
INDIVIDUALIZED READING
INFORMAL READING INVENTORY
INFORMATION NETWORKS (COMMUNICATION)
INITIAL TEACHING ALPHABET
INNER SPEECH (SUBVOCAL)
INSERVICE TEACHER EDUCATION (READING AND COMMUNICATION)
INSTRUCTIONAL IMPROVEMENT
INSTRUCTIONAL INNOVATION (COMMUNICATION)
INSTRUCTIONAL MATERIALS (COMMUNICATION)
INTEGRATED ACTIVITIES
INTERACTION (SPEECH)
INTERACTION PROCESS ANALYSIS (SPEECH)
INTERCOMMUNICATION
INTERDISCIPLINARY APPROACH
INTERPERSONAL COMPETENCE
INTERPERSONAL RELATIONSHIP (COMMUNICATION)
INTERPRETIVE READING
INTRODUCTORY COMPOSITION
JOURNALISM
KINESTHETIC METHODS
KINESTHETIC PERCEPTION
LANGUAGE
LANGUAGE ABILITY
LANGUAGE ARTS
LANGUAGE DEVELOPMENT
LANGUAGE EXPERIENCE APPROACH
LANGUAGE HANDICAPS
LANGUAGE INSTRUCTION
LANGUAGE PATTERNS (ENGLISH)
LANGUAGE PROGRAMS (ENGLISH)
LANGUAGE RESEARCH
LANGUAGE SKILLS (ENGLISH)
LANGUAGE STANDARDIZATION
LANGUAGE TESTS (ENGLISH)
LANGUAGE USAGE (ENGLISH)
LATERAL DOMINANCE
LEADERSHIP (SPEECH)
LEARNING DIFFICULTIES
LEARNING DISABILITIES
LEARNING PROCESSES
LEARNING THEORIES
LETTERS (ALPHABET)
LEXICOLOGY
LINGUISTIC COMPETENCE
LINGUISTIC PERFORMANCE
LINGUISTIC THEORY
LISTENING
LISTENING COMPREHENSION
LISTENING SKILLS
LITERACY
LITERACY EDUCATION
LITERARY ANALYSIS
LITERARY COMPOSITIONS
LITERARY CONVENTIONS
LITERARY CRITICISM
LITERARY GENRES
LITERARY HISTORY
LITERARY STYLES
LITERATURE
LITERATURE APPRECIATION
LITERATURE GUIDES
LITERATURE PROGRAMS
LITERATURE REVIEWS
LOGIC (SPEECH COMMUNICATION)
MANAGEMENT SYSTEMS (COMMUNICATION)
MASS MEDIA (COMMUNICATION)
MEMORY
MOTIVATION TECHNIQUES (COMMUNICATION)
MULTIMEDIA INSTRUCTION (COMMUNICATION)
NARRATION (COMMUNICATION)
NEGRO DIALECTS
NEGRO LITERATURE
NEWSPAPERS
NONSTANDARD DIALECTS
OPEN ENROLLMENT
OPERATIONS RESEARCH (COMMUNICATION)
ORAL COMMUNICATION
ORAL ENGLISH
ORAL EXPRESSION
ORAL READING
ORGANIZATIONAL CLIMATE (COMMUNICATION)
PACING
PAPERBACK BOOKS
PATTERN RECOGNITION
PERCEPTION
PERCEPTUAL DEVELOPMENT
PERCEPTUAL MOTOR COORDINATION
PERSONAL RELATIONSHIP (COMMUNICATION)
PERSONNEL INTEGRATION
PHONEME GRAPHEME CORRESPONDENCE
PHONEMES
PHONEMIC ALPHABETS
PHONICS
PHYSIOLOGY OF READING
PICTORIAL STIMULI
POETRY
PROSE
PSYCHOLINGUISTICS
PSYCHOLOGY OF READING
PUBLIC SPEAKING
PUPPETRY (INTERPRETATION OF CHILDRENS LITERATURE)
RAPID READING
RAPPORT (COMMUNICATION)
READABILITY
READINESS
READING
READING (ENGLISH INSTRUCTION)

CS

READING ABILITY
READING ACHIEVEMENT
READING BEHAVIOR
READING CENTERS
READING CLINICS
READING COMPREHENSION
READING CONSULTANTS
READING DEVELOPMENT
READING DIAGNOSIS
READING DIFFICULTY
READING FAILURE
READING GAMES
READING HABITS
READING IMPROVEMENT
READING INSTRUCTION
READING INTERESTS
READING LEVEL
READING MATERIAL SELECTION
READING MATERIALS
READING PROCESSES
READING PROGRAMS
READING READINESS
READING READINESS TESTS
READING RESEARCH
READING SKILLS
READING SPEED
READING TEACHERS
READING TESTS
RECEPTIVE LANGUAGE (COMMUNICATION)
RECREATIONAL READING
REGIONAL DIALECTS
REMEDIAL READING
REMEDIAL READING CLINICS
REMEDIAL READING PROGRAMS
REMEDIAL READING SERVICES
RESEARCH ON READING
RETARDED READERS
RHETORIC
ROLE PERCEPTION (COMMUNICATION)
SECOND LANGUAGE LEARNING
SECOND LANGUAGES
SEMANTICS
SENSORY INTEGRATION (LANGUAGE)
SEQUENTIAL READING PROGRAMS
SIGHT METHOD

SIGHT VOCABULARY
SILENT READING
SOCIAL DIALECTS
SOCIAL INFLUENCES (SPEECH)
SOCIOLINGUISTICS
SOCIOLOGY OF READING
SPEAKING
SPEECH
SPEECH CURRICULUM
SPEECH EDUCATION
SPEECH INSTRUCTION
SPEECH SKILLS
SPEED READING
SPELLING
STANDARD SPOKEN USAGE
STORY READING
STORY TELLING
STRUCTURAL ANALYSIS
STRUCTURAL GRAMMAR
STUDY SKILLS
SUPPLEMENTARY READING MATERIALS
SYNTAX
SYSTEMS APPROACH (COMMUNICATION)
SYSTEMS DEVELOPMENT (COMMUNICATION)
TEACHING METHODS (ENGLISH,READING,AND SPEECH)
TEACHING OF ENGLISH
TEACHING READING
TEXTBOOKS
THEATER ARTS
TRADITIONAL GRAMMAR
TUTORIAL PROGRAMS (ENGLISH AND READING)
VERBAL COMMUNICATION
VERBAL DEVELOPMENT
VISUAL DISCRIMINATION
VISUAL PERCEPTION
VOCABULARY
VOCABULARY DEVELOPMENT
WORD RECOGNITION
WORK STUDY SKILLS
WORLD LITERATURE
WRITING
WRITING EXERCISES
WRITING SKILLS
WRITTEN LANGUAGE

RURAL EDUCATION AND SMALL SCHOOLS (RC)

SCOPE OF INTEREST:

Education of Indian Americans, Mexican Americans, and Spanish Americans; education of migratory farm workers and their children; the use of outdoor resources for recreation and as a setting for teaching of all disciplines; economic, cultural, and social factors related to educational programs in small schools and rural areas; reports and studies (not subject oriented) on non-metropolitan school systems; disadvantaged segments of rural and small school populations.

Note:

Education of Indian Americans, Mexican Americans, and Spanish Americans includes those living in both non-metropolitan and metropolitan areas. Small schools include any small public, private, or parochial schools located in either metropolitan or non-metropolitan settings.

RC APPLICABLE TERMS AND DESCRIPTORS

ACCULTURATION
AGRICULTURAL LABORERS
AMERICAN INDIAN CULTURE
AMERICAN INDIAN LANGUAGES
AMERICAN INDIANS
BARRIOS
BICULTURALISM
BILINGUAL EDUCATION
BILINGUALISM
BRACEROS
CAMPING
CHICANOS
COMMUNITY DEVELOPMENT
COMPENSATORY EDUCATION (RURAL AREAS)
CULTURAL BACKGROUND
CULTURAL DIFFERENCES
CULTURAL DISADVANTAGEMENT
CULTURALLY DISADVANTAGED (RURAL AREAS)
CULTURE CONFLICT
DISADVANTAGED RURAL POPULATIONS
DISADVANTAGED SMALL SCHOOL POPULATIONS
DISADVANTAGED YOUTH
ECONOMICALLY DISADVANTAGED (RURAL AREAS)
EDUCATIONAL DISADVANTAGEMENT
EDUCATIONAL NEEDS
ESKIMOS
FARM WORKERS
IMMIGRANTS (LABORERS)
INDIAN AMERICANS
MEXICAN AMERICAN HISTORY
MEXICAN AMERICANS

MIGRANT CHILD EDUCATION
MIGRANT CHILDREN
MIGRANT EDUCATION
MIGRANT WORKERS
MIGRANTS
MINORITIES (RURAL AREAS)
MINORITY GROUPS
NATIVE AMERICANS
NEGRO YOUTH (RURAL)
NONMETROPOLITAN AREAS
NONRESERVATION AMERICAN INDIANS
OFF-RESERVATION AMERICAN INDIANS
OFF-RESERVATION BOARDING SCHOOLS
OUTDOOR EDUCATION
POVERTY (RURAL AREAS)
RACIAL DIFFERENCES
RECREATION
RESERVATIONS (INDIAN)
RURAL AREAS
RURAL DEVELOPMENT
RURAL EDUCATION
RURAL POPULATION
RURAL SCHOOLS
RURAL URBAN DIFFERENCES
RURAL YOUTH
SEASONAL LABORERS
SMALL SCHOOLS
SOCIALLY DISADVANTAGED (RURAL AREAS)
SOCIOECONOMIC BACKGROUND
SPANISH AMERICANS
SPANISH SPEAKING

SCIENCE, MATHEMATICS, AND ENVIRONMENTAL EDUCATION (SE)

SCOPE OF INTEREST:

All levels of science, mathematics, and environmental education, (elementary, secondary, higher, and continuing education); development of related curriculum and instructional materials; media; applications to science, mathematics, and environmental education with related methodological studies; impact of interest, intelligence, values, and concept development upon learning related to science, mathematics, and environmental education; related preservice and inservice teacher education and supervision.

SE APPLICABLE TERMS AND DESCRIPTORS

ADDITION
AEROSPACE EDUCATION
AGRICULTURE
ALGEBRA
ALGORITHMS
ANALYTIC GEOMETRY
ANATOMY
ANIMAL BEHAVIOR
ANIMAL FACILITIES
ANIMAL SCIENCE
ARITHMETIC
ASTRONOMY
ATOMIC STRUCTURE
ATOMIC THEORY
AVIATION EDUCATION
BIOCHEMISTRY
BIOLOGICAL INFLUENCES
BIOLOGICAL SCIENCES
BIOLOGY
BIOLOGY INSTRUCTION
BIOPHYSICS
BOTANY
CALCULUS
CELL THEORY
CHARTS
CHEMICAL ANALYSIS
CHEMICAL BONDING
CHEMICAL EQUILIBRIUM
CHEMICAL REACTIONS
CHEMICAL TECHNICIANS
CHEMISTRY
CHEMISTRY INSTRUCTION
CHEMISTRY TEACHERS
CHROMATOGRAPHY
CLASSIFICATION (SCIENCE)
COLLEGE MATHEMATICS
COLLEGE SCIENCE
COMPUTER ORIENTED PROGRAMS
COMPUTERS
CONCEPT DEVELOPMENT (SCIENCE AND MATHEMATICS EDUCATION)
CONGRUENCE
CONSERVATION (CONCEPT)
CURRICULUM DEVELOPMENT (SCIENCE AND MATHEMATICS)
CYTOLOGY
DECIMAL FRACTIONS
DEDUCTIVE METHODS
DISCRIMINANT ANALYSIS
DIVISION
EARTH SCIENCES
ECOLOGY
ECONOMICS (GENERAL)
ELECTRONICS
ELEMENTARY SCHOOL MATHEMATICS
ELEMENTARY SCHOOL SCIENCE
EMBRYOLOGY
ENERGY
ENGINEERING (GENERAL)
ENVIRONMENTAL EDUCATION (SCIENCE)
EVOLUTION
FIELD STUDIES
FIELD TRIPS
FRACTIONS
GENERAL SCIENCE
GENETICS
GEOLOGY
GEOMETRIC CONCEPTS
GEOMETRY
GEOPHYSICS
GRAPHS
INDUCTIVE METHODS
INEQUALITIES
INSTRUCTIONAL MATERIALS (SCIENCE AND MATH. EDUCATION)
INTEGERS
LABORATORIES
LABORATORY EQUIPMENT
LABORATORY EXPERIMENTS
LABORATORY MANUALS
LABORATORY PROCEDURES
LABORATORY SAFETY
LABORATORY TECHNIQUES
LABORATORY TRAINING
LEARNING LABORATORY
LOGIC
MANIPULATIVE MATERIALS
MARINE BIOLOGY
MARINE SCIENCE
MATHEMATICAL APPLICATIONS
MATHEMATICAL CONCEPTS
MATHEMATICAL ENRICHMENT
MATHEMATICAL EXPERIENCE
MATHEMATICAL LOGIC
MATHEMATICAL MODELS
MATHEMATICAL VOCABULARY
MATHEMATICIANS
MATHEMATICS
MATHEMATICS CURRICULUM
MATHEMATICS EDUCATION/INSTRUCTION
MATHEMATICS MATERIALS
MATHEMATICS TEACHER EDUCATION
MATHEMATICS TEACHERS
MEASUREMENT (SCIENCE)
MEDIA APPLICATIONS TO SCIENCE
MOBILE LABORATORIES
MULTIPLICATION
NATURE CENTERS
NETWORKS
NEW MATH
NUCLEAR PHYSICS
NUMBER CONCEPTS
NUMBER SYSTEMS
NUMBERS
OCEANOGRAPHY
OCEANOLOGY
PALEONTOLOGY
PERCENTAGE
PHYSICAL SCIENCES
PHYSICS
PHYSICS CURRICULUM
PHYSICS EXPERIMENTS
PHYSICS INSTRUCTION
PHYSICS TEACHERS
PHYSIOLOGY
PLANE GEOMETRY
PLANT GROWTH
PLANT IDENTIFICATION
PLANT PATHOLOGY
PLANT SCIENCE
POPULATION GROWTH
POTENTIOMETERS (INSTRUMENTS)
PRACTICAL MATHEMATICS
PRIME NUMBERS
PROBABILITY THEORY
PROBLEM SETS
PROBLEM SOLVING
PROGRAMING
RADAR
RADIATION
RADIATION BIOLOGY
RADIATION EFFECTS
RADIOISOTOPES
RATIONAL NUMBERS
RATIOS (MATHEMATICS)
RECIPROCALS (MATHEMATICS)
RELATIONSHIP
REMEDIAL ARITHMETIC
REMEDIAL MATHEMATICS
SCIENCE ACTIVITIES
SCIENCE CAREERS
SCIENCE CLUBS
SCIENCE CONSULTANTS
SCIENCE COURSE IMPROVEMENT PROJECT
SCIENCE COURSES
SCIENCE CURRICULUM
SCIENCE DEPARTMENTS
SCIENCE EDUCATION
SCIENCE EDUCATION HISTORY
SCIENCE EQUIPMENT
SCIENCE EXPERIMENTS
SCIENCE FACILITIES
SCIENCE FAIRS
SCIENCE HISTORY
SCIENCE INSTITUTES
SCIENCE INSTRUCTION
SCIENCE LABORATORIES
SCIENCE MATERIALS
SCIENCE PROGRAMS
SCIENCE PROJECTS
SCIENCE SUPERVISION
SCIENCE TEACHER EDUCATION
SCIENCE TEACHERS
SCIENCE TEACHING CENTERS
SCIENCE TESTS
SCIENCE UNITS
SCIENTIFIC ATTITUDES
SCIENTIFIC CONCEPTS
SCIENTIFIC ENTERPRISE
SCIENTIFIC LITERACY
SCIENTIFIC MANPOWER
SCIENTIFIC METHODOLOGY
SCIENTIFIC PERSONNEL
SCIENTIFIC PRINCIPLES
SCIENTIFIC RESEARCH
SCIENTISTS
SECONDARY SCHOOL MATHEMATICS
SECONDARY SCHOOL SCIENCE
SET THEORY
SOIL SCIENCE
SOLID GEOMETRY
SPACE SCIENCE
STATISTICS (MATHEMATICS)
STUDENT SCIENCE INTERESTS
SUBTRACTION
SUMMER SCIENCE PROGRAMS
SYMBOLS (MATHEMATICS)
SYMMETRY
TAXONOMY
TECHNICAL MATHEMATICS
TOPOLOGY
TRANSFORMATIONS (MATHEMATICS)
TRIGONOMETRY
WHOLE NUMBERS
WORKSHEETS
ZOOLOGY
ZOOS

SOCIAL SCIENCE/SOCIAL STUDIES (SO)

SCOPE OF INTEREST:

All levels of social studies and social science education; social studies teachers; content of the social science disciplines; applications of learning theory, curriculum theory, child development theory and instructional theory to social science education; research and development projects, programs, and materials in social science education; the contributions of social science disciplines (educational anthropology, economics, history, sociology, and psychology) to knowledge and understanding of the educational process and a successful educational operation; education as a social science; social science education and the community; religious education; the humanities; music education; art education; and comparative education.

SO APPLICABLE TERMS AND DESCRIPTORS

ACADEMIC ACHIEVEMENT
ACADEMIC PERFORMANCE
ACTIVISM
AFFECTIVE BEHAVIOR
AFFECTIVE OBJECTIVES
AFRICAN AMERICAN STUDIES
ALCOHOLISM
AMERICAN GOVERNMENT
ANTHROPOLOGY
ANXIETY
ARCHAEOLOGY
AREA STUDIES
ART
ART EDUCATION
AUTHORITARIANISM
BEHAVIORAL SCIENCE RESEARCH
BEHAVIORAL SCIENCES
BLACK STUDIES
CHILD DEVELOPMENT (AS PART OF PSYCHOLOGY)
CHILD PSYCHOLOGY
CITIZENSHIP
CIVICS
CIVIL LIBERTIES
CIVIL RIGHTS
COMMUNISM
COMMUNITY ACTION
COMMUNITY RESOURCES
COMMUNITY STUDIES
COMPARATIVE EDUCATION
CONSTITUTIONAL HISTORY
CONSUMER ECONOMICS
CONSUMER EDUCATION (AS PART OF SOCIAL STUDIES)
CROSS CULTURAL STUDIES
CROSS CULTURAL TRAINING (CULTURAL AWARENESS)
CULTURAL CONTEXT
CULTURAL EDUCATION
CULTURAL EXCHANGE
CULTURE CONFLICT
CURRENT EVENTS
CURRICULUM DESIGN (THEORY)
CURRICULUM DEVELOPMENT (THEORY)
DECISION MAKING
DEDUCTIVE METHODS
DEMOGRAPHY
DEVELOPED NATIONS
DEVELOPING NATIONS
[illegible]USION
[illegible]OVERY LEARNING
DISCUSSION (TEACHING TECHNIQUE)
DISSENT
DRUG ABUSE
ECONOMIC EDUCATION
ECONOMICS (GENERAL) (AS PART OF SOCIAL STUDIES)
EDUCATION
EDUCATIONAL CHANGE
EDUCATIONAL ECONOMICS
EDUCATIONAL HISTORY
EDUCATIONAL IMPROVEMENT
EDUCATIONAL INNOVATION
EDUCATIONAL OBJECTIVES
EDUCATIONAL PHILOSOPHY
EDUCATIONAL PSYCHOLOGY
EDUCATIONAL RESEARCH
EDUCATIONAL SOCIOLOGY
EDUCATIONAL THEORY
EFFECTIVE TEACHING
ENVIRONMENTAL EDUCATION (AS PART OF SOCIAL STUDIES)
ETHICAL INSTRUCTION
ETHNIC RELATIONS
ETHNIC STUDIES
ETHNOLOGY
FAMILY (SOCIOLOGICAL UNIT)
FEMINISM
FOREIGN CULTURE
FOREIGN RELATIONS
FOUNDATIONS OF EDUCATION
GEOGRAPHIC REGIONS
GEOGRAPHY
GEOGRAPHY INSTRUCTION
GOVERNMENT
HISTORY
HISTORY INSTRUCTION
HUMAN RELATIONS
HUMAN RELATIONS PROGRAMS
HUMAN RELATIONS UNITS
HUMAN SERVICES (SOCIAL WELFARE)
HUMANISM
HUMANITIES (ART, MUSIC, CULTURAL STUDIES)
HUMANITIES INSTRUCTION (ART, MUSIC, CULTURAL STUDIES)
HUMANIZATION
INDIAN HISTORY
INDIVIDUALIZED INSTRUCTION (THEORY)
INDIVIDUALIZED PROGRAMS (THEORY)
INDUCTIVE METHODS (TEACHING)
INQUIRY TRAINING
INSTRUCTIONAL INNOVATION (SOCIAL STUDIES)
INTELLECTUAL DEVELOPMENT
INTELLECTUAL PERFORMANCE
INTELLIGENCE FACTORS
INTERACTION PROCESS ANALYSIS
INTERCULTURAL PROGRAMS
INTERDISCIPLINARY APPROACH
INTERFAITH RELATIONS
INTERGROUP EDUCATION
INTERGROUP RELATIONS (HUMAN RELATIONS)
INTERNATIONAL EDUCATION
INTERNATIONAL EXCHANGES
INTERPERSONAL RELATIONSHIP (HUMAN RELATIONS)
LAW ENFORCEMENT
LAW INSTRUCTION
LEADERSHIP RESPONSIBILITY
LEADERSHIP TRAINING (COMMUNITY)
LEARNING
LEARNING MOTIVATION
LEARNING PROCESSES
LEARNING THEORIES
LEGAL PROBLEMS
LEISURE TIME
MENTAL DEVELOPMENT
MEXICAN AMERICAN HISTORY
MINORITY GROUPS
MODELS (THEORY)
MOTIVATION (ENVIRONMENT)
MOTIVATION TECHNIQUES
MUSIC
MUSIC EDUCATION
NON-WESTERN CIVILIZATION
OBJECTIVES
ORGANIZATIONAL CLIMATE
OVERPOPULATION
PARENT ATTITUDES
PEACE
PERCEPTION (PSYCHOLOGY)
PERCEPTUAL DEVELOPMENT (PSYCHOLOGY)
PERCEPTUAL MOTOR COORDINATION (PSYCHOLOGY)
PERSONALITY
PERSONALITY DEVELOPMENT
PHILOSOPHY
POLITICAL AFFILIATION
POLITICAL INFLUENCES (SOCIAL STUDIES)
POLITICAL ISSUES (SOCIAL STUDIES)
POLITICAL POWER (SOCIAL STUDIES)
POLITICAL SCIENCE
POLITICAL SOCIALIZATION
POLLUTION
POPULATION EDUCATION (SOCIAL STUDIES)
POWER STRUCTURE (SOCIAL STUDIES)
PROBLEM SOLVING
PSYCHOLOGICAL CHARACTERISTICS
PSYCHOLOGY (AS A SOCIAL SCIENCE)
PSYCHOLOGY OF LEARNING
PUBLIC AFFAIRS EDUCATION
RACE RELATIONS
REINFORCEMENT
RELEVANCE (EDUCATION)
RELIGIOUS EDUCATION
RESEARCH
RESEARCH METHODOLOGY
RESEARCH REVIEW (PUBLICATIONS)
ROLE PERCEPTION
ROLE THEORY
SELF ACTUALIZATION
SELF CONCEPT
SENSITIVITY TRAINING
SKILL DEVELOPMENT
SOCIAL ACTION
SOCIAL ATTITUDES
SOCIAL BEHAVIOR
SOCIAL CHANGE
SOCIAL DEVELOPMENT
SOCIAL INFLUENCES
SOCIAL PLANNING
SOCIAL PROBLEMS
SOCIAL PSYCHOLOGY
SOCIAL RELATIONS
SOCIAL SCIENCES
SOCIAL STRATIFICATION
SOCIAL STUDIES
SOCIAL STUDIES TEACHERS
SOCIAL STUDIES UNITS
SOCIAL SYSTEMS
SOCIAL VALUES
SOCIAL WELFARE
SOCIALIZATION
SOCIALLY DEVIANT BEHAVIOR
SOCIOECONOMIC INFLUENCES
SOCIOECONOMIC STATUS
SOCIOLOGY
STATE LAWS
STATE LEGISLATION
STUDENT ALIENATION
STUDENT ATTITUDES
STUDENT BEHAVIOR
STUDENT CHARACTERISTICS
STUDENT PARTICIPATION
STUDENT ROLE
STUDENT SUBCULTURES
STUDENT TEACHER RELATIONSHIP
SYSTEMS ANALYSIS
SYSTEMS APPROACH

TEACHING
TEACHING METHODS (THEORY)
TEACHING MODELS
TRANSFER OF TRAINING
UNITED STATES HISTORY
URBAN EDUCATION
URBAN STUDIES
URBANIZATION

VALUES
VISUAL DISCRIMINATION (PSYCHOLOGY)
VISUAL PERCEPTION (PSYCHOLOGY)
WOMENS STUDIES
WORLD AFFAIRS
WORLD HISTORY
WORLD PROBLEMS

TEACHER EDUCATION (SP)

SCOPE OF INTEREST:

School personnel at all levels from preschool through university education; encompassing all issues from selection through preservice and inservice preparation and training to retirement; curriculum-oriented research reports; educational theory and philosophy; Title XI NDEA Institutes (not covered by subject speciality in other clearinghouses); general reports on education not specifically covered by Educational Management; health, physical education, and recreation.

SP APPLICABLE TERMS AND DESCRIPTORS

ACCREDITATION (INSTITUTIONS)
ADMINISTRATOR ATTITUDES
AFFECTIVE BEHAVIOR
AFFECTIVE OBJECTIVES
AFFILIATED SCHOOLS
AIDES (TEACHER)
ATHLETIC ACTIVITIES
BEGINNING TEACHERS
BEHAVIOR CHANGE (BEHAVIOR MODIFICATION)
BEHAVIOR PATTERNS
BEHAVIORAL OBJECTIVES
BOARD OF EDUCATION POLICY/ROLE
CERTIFICATION (TEACHER CERTIFICATION)
CHANGE AGENTS
CHANGING ATTITUDES
CLASSROOM ENVIRONMENT
CLASSROOM OBSERVATION TECHNIQUES
CLINICAL PROFESSORS
COLLEGE COMMUNITY RELATIONSHIPS
COLLEGE SCHOOL COOPERATION
COLLEGE SUPERVISORS
COMMUNITY RESOURCE VOLUNTEERS
COMMUNITY SCHOOL RELATIONSHIP
COOPERATING TEACHERS
CROSS AGE TEACHING
CROSS CULTURAL TRAINING
CURRICULUM
CURRICULUM DESIGN
CURRICULUM DEVELOPMENT
CURRICULUM GUIDES
DANCE (PHSYICAL EDUCATION)
DIFFERENTIATED STAFFS
DISCOVERY LEARNING
DISCUSSION (TEACHING TECHNIQUE)
EDUCATION (GENERAL)
EDUCATION COURSES
EDUCATIONAL ACCOUNTABILITY
EDUCATIONAL CHANGE (INNOVATIONS)
EDUCATIONAL IMPROVEMENT (NEW PROGRAMS)
EDUCATIONAL INNOVATION
EDUCATIONAL PHILOSOPHY
EDUCATIONAL RESEARCH/RESEARCHERS
EDUCATIONAL THEORY
EDUCATORS (GENERAL)
EFFECTIVE TEACHING
ELEMENTARY SCHOOL TEACHERS
EVALUATION CRITERIA
EVALUATION METHODS/PROCEDURES/TECHNIQUES
FACULTY
FIELD EXPERIENCE PROGRAMS
FIRST AID (HEALTH EDUCATION)
FOUNDATIONS OF EDUCATION
GRADES
HEALTH EDUCATION
HYGIENE (HEALTH EDUCATION)
INDIVIDUALIZED CURRICULUM (TEACHING)
INDIVIDUALIZED LEARNING (MOTIVATIONAL TECHNIQUES)
INDIVIDUALIZED PROGRAMS (TEACHING)
INNOVATIONS IN EDUCATION (RESEARCH)
INNOVATIVE INSTRUCTIONAL PRACTICES
INQUIRY TRAINING
INSERVICE TEACHER EDUCATION
INSTITUTES (TRAINING PROGRAMS)
INSTITUTIONAL ROLE
INSTRUCTIONAL INNOVATION
INSTRUCTIONAL STAFF (GENERAL)
INSTRUCTORS (GENERAL)
INTERACTION PROCESS ANALYSIS
INTERAGENCY COOPERATION
INTERDISCIPLINARY APPROACH
INTERNSHIP PROGRAMS
LABORATORY SCHOOLS
LABORATORY TRAINING (TEACHERS)
LEARNING PROCESSES
LEARNING THEORIES
LESSON OBSERVATION CRITERIA
MASTER TEACHERS
MEASUREMENT PROCEDURES/TECHNIQUES
MEDICAL SERVICES (HEALTH EDUCATION)
MICROTEACHING
MODELS (TEACHING)
MOTIVATION TECHNIQUES (TEACHING)
NATIONAL DEFENSE EDUCATION ACT INSTITUTES
NONGRADED SCHOOL (CONTINUOUS PROGRESS PLAN)
NONVERBAL COMMUNICATION
OPEN EDUCATION
OPEN PLAN SCHOOLS
ORAL COMMUNICATION (TEACHING)
ORGANIZATIONAL CLIMATE
ORIENTATION
OUTDOOR EDUCATION
PARAPROFESSIONAL SCHOOL PERSONNEL
PARENT TEACHER COOPERATION
PEER TEACHING
PERFORMANCE BASED TEACHER EDUCATION
PERFORMANCE CRITERIA
PERFORMANCE SPECIFICATIONS
PHILOSOPHY (EDUCATIONAL)
PHYSICAL EDUCATION
PHYSICAL EDUCATION (PRIMARY GRADES)
PHYSICAL FITNESS
POST DOCTORAL EDUCATION (TEACHERS)
PRACTICUMS
PRESERVICE EDUCATION (TEACHERS)
PRESERVICE TEACHER EDUCATION
PROGRAM DESCRIPTIONS
PROGRAM DEVELOPMENT
PROGRAM EFFECTIVENESS
PROGRAM PLANNING
PROTOCOL MATERIALS
RECREATION (HEALTH, PHYSICAL EDUCATION AND RECREATION)
RECRUITMENT (TEACHER)
REINFORCEMENT (TEACHING)
RELEVANCE (EDUCATION)
RESEARCH AND DEVELOPMENT CENTERS
RETIREMENT (TEACHER)
ROLE PERCEPTION
SALARIES (TEACHER)
SCHOOL CADRES
SCHOOL COMMUNITY RELATIONSHIP
SCHOOL PERSONNEL/FACULTY
SCHOOLS OF EDUCATION
SECONDARY SCHOOL TEACHERS
SENSITIVITY TRAINING
SEX EDUCATION (HEALTH EDUCATION)
SIMULATION
STAFF ROLE
STAFF UTILIZATION
STATE BOARDS OF EDUCATION
STATE DEPARTMENTS OF EDUCATION
STATE STANDARDS
STUDENT ATTITUDES
STUDENT CENTERED CURRICULUM
STUDENT TEACHER RELATIONSHIP
STUDENT TEACHERS/TEACHING
STUDENT VOLUNTEERS
SUPERVISORY METHODS
SUPERVISORY TRAINING
TEACHER
TEACHER ADMINISTRATOR RELATIONSHIP
TEACHER AIDES
TEACHER ASSOCIATIONS
TEACHER ATTITUDES
TEACHER CERTIFICATION
TEACHER CHARACTERISTICS
TEACHER EDUCATION
TEACHER EDUCATION CURRICULUM
TEACHER EDUCATOR EDUCATION
TEACHER EMPLOYMENT
TEACHER EVALUATION
TEACHER MILITANCY
TEACHER PROMOTION
TEACHER RECRUITMENT/SELECTION
TEACHER RETIREMENT
TEACHER ROLE
TEACHER SALARIES
TEACHER SELECTION
TEACHER STRIKES
TEACHER SUPERVISION
TEACHER SUPPLY AND DEMAND
TEACHERS (GENERAL)
TEACHING
TEACHING AIDES
TEACHING ASSISTANTS
TEACHING METHODS
TEACHING MODELS
TEACHING SKILLS
TEACHING TECHNIQUES
TEAM TEACHING
TENURE (TEACHERS)
TITLE XI NDEA INSTITUTES
TRAINING LABORATORIES
TUTORIAL PROGRAMS
TUTORING
VERBAL COMMUNICATION
VOLUNTEERS (TEACHER AIDES)
VOUCHERS

TESTS, MEASUREMENT, AND EVALUATION (TM)

SCOPE OF INTEREST:

Tests, scales, inventories, or other measurement devices or instruments, including discussions of such instruments; test development and construction; reviews of tests; measurement and evaluation procedures and techniques; applications and procedures of measurement or evaluation in educational projects or programs.

Note:

Documents concerned primarily with the procedures and techniques used in a project to evaluate, measure, or test certain variables (whatever the content, population, or level of the study itself may be) should be directed to ERIC/TM. If, however, the focus is mainly on the subject matter, and evaluation plays only an incidental role, the document should be forwarded to the appropriate subject-oriented Clearinghouse.

TM APPLICABLE TERMS AND DESCRIPTORS

ABILITY GROUPING
ABSTRACTION TESTS
ACADEMIC ACHIEVEMENT (TESTING OR TESTS)
ACADEMIC PERFORMANCE (TESTS, MEASUREMENT, EVALUATION)
ACCOUNTABILITY
ACHIEVEMENT TESTS
AFFECTIVE TESTS
ANSWER KEYS
APTITUDE
APTITUDE TESTS
ASSOCIATION TESTS
ATTITUDE TESTS
AUDIOMETRIC TESTS
AUDITORY TESTS
AUDITORY VISUAL TESTS
BAYESIAN STATISTICS
BEHAVIOR RATING SCALES
BEHAVIORAL OBJECTIVES (ASSESSING/MEASURING ATTAINMENT)
BIOGRAPHICAL INVENTORIES
CLASSROOM OBSERVATION TECHNIQUES (EVALUATION)
CLOZE PROCEDURE
COGNITIVE MEASUREMENT
COGNITIVE TESTS
COLLEGE ENTRANCE EXAMINATIONS
CORRELATION
COURSE EVALUATION
CREATIVITY TESTS
CRITERION REFERENCED TESTS
CULTURE FREE TESTS
DECISION MAKING (EVALUATING EFFECTIVENESS/PROCESSES)
DIAGNOSTIC TESTS
EDUCATIONAL ACCOUNTABILITY
EDUCATIONAL IMPROVEMENT
EDUCATIONAL OBJECTIVES (EVALUATING THE ATTAINMENT OF)
ENVIRONMENTAL MEASURES
EQUIVALENCY TESTS
ESSAY TESTS
EVALUATION
EVALUATION CRITERIA
EVALUATION METHODS/PROCEDURES/TECHNIQUES
FACTOR ANALYSIS
FACTOR STRUCTURE
FACULTY EVALUATION
FAMILY MEASUREMENT TECHNIQUES
FORCED CHOICE TECHNIQUE
FORMATIVE EVALUATION
GRADE EQUIVALENT SCALES/SCORES
GROUP INTELLIGENCE TESTING/TESTS
GROUP TESTS
HYPOTHESIS TESTING
IDENTIFICATION TESTS
INDIVIDUAL TESTS
INFORMAL READING INVENTORY
INTELLIGENCE QUOTIENT
INTELLIGENCE TESTS
INTEREST SCALES
INTEREST TESTS
INVENTORIES
ITEM ANALYSIS
ITEM BANKS/POOLS
ITEM SAMPLING
LANGUAGE TESTS
LISTENING TESTS
MATHEMATICAL MODELS
MATURITY TESTS
MEASUREMENT
MEASUREMENT GOALS
MEASUREMENT INSTRUMENTS
MEASUREMENT PROCEDURES/TECHNIQUES
MENTAL TESTS
MODELS (MEASUREMENT STRATEGIES)
MULTIDIMENSIONAL SCALING
MULTIPLE CHOICE TESTS
NATIONAL ASSESSMENT
NATIONAL COMPETENCY TESTS
NATIONAL INTELLIGENCE NORM
NATIONAL NORMS
NONPARAMETRIC STATISTICS
NONVERBAL TESTS
NORM REFERENCED TESTS
OBJECTIVE TESTS
OCCUPATIONAL TESTS
PERCEPTION TESTS
PERFORMANCE CONTRACTS
PERFORMANCE TESTS
PERSONALITY ASSESSMENT
PERSONALITY TESTS
POST TESTING
PREDICTION
PREDICTIVE ABILITY (TESTING)
PREDICTIVE MEASUREMENT
PREDICTIVE VALIDITY
PREDICTOR VARIABLES
PRESCHOOL TESTS
PRESCRIPTIVE TESTS
PRETESTING
PRETESTS
PROBLEM SETS
PROGNOSTIC TESTS
PROGRAM EFFECTIVENESS (MEASUREMENT OR EVALUATION)
PROGRAM EVALUATION
PROJECTIVE TESTS
PSYCHOLOGICAL EVALUATION
PSYCHOLOGICAL TESTING
PSYCHOLOGICAL TESTS
PSYCHOMETRICS
PSYCHOMETRISTS
PUZZLES
Q SORT
QUESTIONNAIRES
RATING SCALES
RAW SCORES
READING READINESS TESTS
READING TESTS
RELIABILITY
RESEARCH DESIGN
RESEARCH METHODOLOGY (TESTS)
RESPONSE STYLE (TESTS)
SAMPLING
SCALES
SCHOOL READINESS TESTS
SCIENCE TESTS
SCORES/SCORING
SCORING FORMULAS
SCORING SYSTEMS
SCREENING TESTS
SELF CONCEPT TESTS
SEMANTIC DIFFERENTIAL
SITUATIONAL TESTS
SOCIOMETRIC TECHNIQUES
SPEECH TESTS
STANDARD ERROR OF MEASUREMENT
STANDARDIZED TESTS
STATE SURVEYS (STATEWIDE ASSESMENT)
STATISTICAL ANALYSIS
STATISTICAL BIAS
STATISTICS
STUDENT ATTITUDES (MEASUREMENT OR ASSESSMENT)
STUDENT EVALUATION (THEORY, PROCESS, MEASURES)
STUDENT TESTING
SUMMATIVE EVALUATION
TACTUAL VISUAL TESTS
TAILORED TESTING
TALENT IDENTIFICATION
TEACHER EVALUATION
TEST BIAS
TEST CONSTRUCTION
TEST INTERPRETATION
TEST RELIABILITY
TEST RESULTS
TEST REVIEWS
TEST SCORING MACHINES
TEST SELECTION
TEST VALIDITY
TESTING
TESTING PROBLEMS
TESTING PROGRAMS
TESTS
TESTS OF SIGNIFICANCE
TIMED TESTS
TRUE SCORES
VALIDITY
VERBAL TESTS
VISION TESTS
VISUAL MEASURES

APPENDIX C

ERIC CLEARINGHOUSE SCOPE OF INTEREST GUIDE

INDEX

The following list of index terms represents an amalgamation (alphabetically arranged) of all the "applicable terms and descriptors" submitted by the ERIC Clearinghouses.

CG	ABILITY
TM	ABILITY GROUPING
UD	ABILITI GROUPING
CG	ABORTIONS
IR	ABSTRACTING
TM	ABSTRACTION TESTS
IR	ABSTRACTS
CG	ACADEMIC ACHIEVEMENT
HE	ACADEMIC ACHIEVEMENT
PS	ACADEMIC ACHIEVEMENT
SO	ACADEMIC ACHIEVEMENT
UD	ACADEMIC ACHIEVEMENT
JC	ACADEMIC ACHIEVEMENT (JUNIOR COLLEGE STUDENTS)
CS	ACADEMIC ACHIEVEMENT (READING)
EC	ACADEMIC ACHIEVEMENT (SPECIAL EDUCATION)
TM	ACADEMIC ACHIEVEMENT (TESTING OR TESTS)
CE	ACADEMIC EDUCATION
EC	ACADEMIC EDUCATION
EC	ACADEMIC PERFORMANCE
SO	ACADEMIC PERFORMANCE
UD	ACADEMIC PERFORMANCE
TM	ACADEMIC PERFORMANCE (TESTS, MEASUREMENT, EVALUATION)
EC	ACADEMICALLY TALENTED CHILDREN
TM	ACCOUNTABILITY
CE	ACCOUNTING
EC	ACCREDITATION (INSTITUTIONS)
SP	ACCREDITATION (INSTITUTIONS)
JC	ACCREDITATION (JUNIOR COLLEGES)
RC	ACCULTURATION
PS	ACHIEVEMENT NEED
EC	ACHIEVEMENT NEED
TM	ACHIEVEMENT TESTS
FL	ACOUSTIC PHONETICS
CS	ACTING
CG	ACTIVISM
HE	ACTIVISM
SO	ACTIVISM
UD	ACTIVISM
JC	ACTIVISM (JUNIOR COLLEGES)
SE	ADDITION
CG	ADJUSTMENT (TO ENVIRONMENT)
EA	ADMINISTRATION
EA	ADMINISTRATIVE AGENCIES
EA	ADMINISTRATIVE CHANGES
EC	ADMINISTRATIVE CHANGES
PS	ADMINISTRATIVE CHANGES
EA	ADMINISTRATIVE ORGANIZATION
JC	ADMINISTRATIVE ORGANIZATION (JUNIOR COLLEGES)
EA	ADMINISTRATIVE PERSONNEL
JC	ADMINISTRATIVE PERSONNEL (JUNIOR COLLEGES)
EA	ADMINISTRATIVE POLICY
EC	ADMINISTRATIVE POLICY (SPECIAL EDUCATION)
EA	ADMINISTRATIVE PRINCIPLES
EA	ADMINISTRATIVE PROBLEMS
EC	ADMINISTRATIVE PROBLEMS (SPECIAL EDUCATION)
EA	ADMINISTRATOR ATTITUDES
EC	ADMINISTRATOR ATTITUDES
PS	ADMINISTRATOR ATTITUDES
SP	ADMINISTRATOR ATTITUDES
UD	ADMINISTRATOR ATTITUDES
EA	ADMINISTRATOR BACKGROUND
EA	ADMINISTRATOR CHARACTERISTICS
HE	ADMINISTRATOR CHARACTERISTICS
EA	ADMINISTRATOR EVALUATION
EC	ADMINISTRATOR EVALUATION (SPECIAL EDUCATION)
EA	ADMINISTRATOR GUIDES
EA	ADMINISTRATOR QUALIFICATIONS
EC	ADMINISTRATOR QUALIFICATIONS (SPECIAL EDUCATION)
EA	ADMINISTRATOR RESPONSIBILITY
EC	ADMINISTRATOR RESPONSIBILITY (SPECIAL EDUCATION)
EA	ADMINISTRATOR ROLE
JC	ADMINISTRATOR ROLE (JUNIOR COLLEGES)
EC	ADMINISTRATOR ROLE (SPECIAL EDUCATION)
EA	ADMINISTRATOR SELECTION
EC	ADMINISTRATOR SELECTION (SPECIAL EDUCATION)
EA	ADMINISTRATORS
EC	ADMINISTRATORS (SPECIAL EDUCATION)
CG	ADMISSION (SCHOOL) (USE FOR K-12)
EC	ADMISSION (SCHOOL) (USE FOR K-12)
PS	ADMISSION (SCHOOL) (USE FOR K-12)
EA	ADMISSIONS (GENERAL)
CG	ADOPTION (IDEAS)
CE	ADULT BASIC EDUCATION
CE	ADULT COUNSELING
CG	ADULT COUNSELING
CE	ADULT EDUCATION
JC	ADULT EDUCATION (JUNIOR COLLEGES)
CE	ADULT EDUCATORS
CS	ADULT READING PROGRAMS
CE	ADULT VOCATIONAL EDUCATION
HE	ADVANCED EDUCATION
IR	ADVANCED SYSTEMS
SE	AEROSPACE EDUCATION
PS	AFFECTIVE BEHAVIOR
SO	AFFECTIVE BEHAVIOR
SP	AFFECTIVE BEHAVIOR
IR	AFFECTIVE OBJECTIVES
SO	AFFECTIVE OBJECTIVES
SP	AFFECTIVE OBJECTIVES
TM	AFFECTIVE TESTS

SP	AFFILIATED SCHOOLS
SO	AFRICAN AMERICAN STUDIES
UD	AFRICAN AMERICAN STUDIES
FL	AFRICAN LANGUAGES
CE	AGE DIFFERENCES
EC	AGE DIFFERENCES
PS	AGE DIFFERENCES
CG	AGE GROUPS
CG	AGGRESSION
CE	AGRIBUSINESS
CE	AGRICULTURAL EDUCATION
CE	AGRICULTURAL ENGINEERING
RC	AGRICULTURAL LABORERS
CE	AGRICULTURAL OCCUPATIONS
CE	AGRICULTURAL PRODUCTION
SE	AGRICULTURE
PS	AIDES (TEACHER)
SP	AIDES (TEACHER)
EA	AIR CONDITIONING
EA	AIR INFLATED STRUCTURES
EA	AIR SUPPORTED STRUCTURES
IR	AIRBORNE TELEVISION
CE	AIRCRAFT PILOTS
CG	ALCOHOLISM
SO	ALCOHOLISM
SE	ALGEBRA
SE	ALGORITHMS
EA	ALTERNATIVE SCHOOLS
SO	AMERICAN GOVERNMENT
RC	AMERICAN INDIAN CULTURE
RC	AMERICAN INDIAN LANGUAGES
CE	AMERICAN INDIANS
RC	AMERICAN INDIANS
CS	AMERICAN LITERATURE
IR	ANALOG COMPUTERS
SE	ANALYTIC GEOMETRY
EC	ANATOMY
SE	ANATOMY
CG	ANCILLARY SERVICES
SE	ANIMAL BEHAVIOR
SE	ANIMAL FACILITIES
SE	ANIMAL SCIENCE
IR	ANIMATION
EA	ANNUAL REPORTS (GENERAL)
TM	ANSWER KEYS
SO	ANTHROPOLOGY
CG	ANXIETY
EC	ANXIETY
PS	ANXIETY
SO	ANXIETY
EC	APHASIA
CS	APHASIA (READING)
FL	APPLIED LINGUISTICS
CE	APPRENTICESHIPS
TM	APTITUDE
TM	APTITUDE TESTS
FL	ARABIC
SO	ARCHAEOLOGY
EA	ARCHITECTS
EA	ARCHITECTURAL CHARACTER
IR	ARCHIVES
SO	AREA STUDIES
CE	AREA VOCATIONAL SCHOOLS
SE	ARITHMETIC
CE	ARMED FORCES
SO	ART
SO	ART EDUCATION
HE	ARTICULATION (PROGRAM)
JC	ARTICULATION (PROGRAM) (BETWEEN JC'S AND OTHER INSTS.)
EC	ARTICULATION (SPEECH)
FL	ARTICULATION (SPEECH)
IR	ARTIFICIAL INTELLIGENCE
EA	ASSISTANT SUPERINTENDENT ROLE
JC	ASSOCIATE DEGREE
TM	ASSOCIATION TESTS
SE	ASTRONOMY
SP	ATHLETIC ACTIVITIES
SE	ATOMIC STRUCTURE
SE	ATOMIC THEORY
EA	ATTENDANCE OFFICERS
CG	ATTENDANCE PATTERNS
EA	ATTENDANCE RECORDS
TM	ATTITUDE TESTS
CG	ATTITUDES
CS	ATTITUDES (AS RELATED TO SPEECH)
EA	ATTRITION (STATISTICAL STUDIES)
IR	AUDIENCES
FL	AUDIO ACTIVE LABORATORIES
IR	AUDIO ACTIVE LABORATORIES (TECHNOLOGY)
IR	AUDIO EQUIPMENT
FL	AUDIO PASSIVE LABORATORIES
IR	AUDIO PASSIVE LABORATORIES (TECHNOLOGY)
FL	AUDIO VIDEO LABORATORIES
IR	AUDIO VIDEO LABORATORIES (TECHNOLOGY)
FL	AUDIOLINGUAL METHODS
TM	AUDIOMETRIC TESTS
IR	AUDIOVISUAL AIDS
IR	AUDIOVISUAL AIDS (LIBRARIES OR INSTRUCTIONAL MAT.CTRS.)
CS	AUDIOVISUAL AIDS (RE: TEACHING COMMUNICATION SKILLS)
EC	AUDIOVISUAL AIDS (SPECIAL EDUCATION)

IR	AUDIOVISUAL CENTERS
EC	AUDIOVISUAL CENTERS (SPECIAL EDUCATION)
IR	AUDIOVISUAL COMMUNICATION
IR	AUDIOVISUAL COORDINATORS
IR	AUDIOVISUAL DIRECTORS
EC	AUDIOVISUAL INSTRUCTION
IR	AUDIOVISUAL INSTRUCTION
PS	AUDIOVISUAL INSTRUCTION
EC	AUDIOVISUAL MATERIALS
FL	AUDIOVISUAL MATERIALS
PS	AUDIOVISUAL MATERIALS
EC	AUDIOVISUAL MEDIA
IR	AUDIOVISUAL MEDIA
IR	AUDIOVISUAL PROGRAMS
CS	AUDITORY DISCRIMINATION
EC	AUDITORY DISCRIMINATION
PS	AUDITORY DISCRIMINATION
CS	AUDITORY PERCEPTION
EC	AUDITORY PERCEPTION
PS	AUDITORY PERCEPTION
TM	AUDITORY TESTS
TM	AUDITORY VISUAL TESTS
EC	AURALLY HANDICAPPED
PS	AURALLY HANDICAPPED
EA	AUTHORITARIANISM
SO	AUTHORITARIANISM
CE	AUTO MECHANICS
IR	AUTOINSTRUCTIONAL AIDS
IR	AUTOINSTRUCTIONAL LABORATORIES
IR	AUTOINSTRUCTIONAL METHODS
IR	AUTOMATIC ABSTRACTING
IR	AUTOMATIC INDEXING
IR	AUTOMATION
EA	AVERAGE DAILY ATTENDANCE
SE	AVIATION EDUCATION
EA	BARGAINING, COLLECTIVE
RC	BARRIOS
CS	BASIC READING
PS	BASIC SKILLS
FL	BASIC SKILLS (FOREIGN LANGUAGE)
CS	BASIC SKILLS (READING,WRITING,SPEAKING)
TM	BAYESIAN STATISTICS
CS	BEGINNING READING
FL	BEGINNING READING (FOREIGN LANGUAGES)
SP	BEGINNING TEACHERS
CE	BEHAVIOR CHANGE
CG	BEHAVIOR CHANGE
EC	BEHAVIOR CHANGE
PS	BEHAVIOR CHANGE
UD	BEHAVIOR CHANGE
SP	BEHAVIOR CHANGE (BEHAVIOR MODIFICATION)
EC	BEHAVIOR DEVELOPMENT
PS	BEHAVIOR DEVELOPMENT
CG	BEHAVIOR PATTERNS
EC	BEHAVIOR PATTERNS
PS	BEHAVIOR PATTERNS
SP	BEHAVIOR PATTERNS
TM	BEHAVIOR RATING SCALES
CG	BEHAVIOR THEORIES
CG	BEHAVIORAL COUNSELING
EC	BEHAVIORAL COUNSELING
CG	BEHAVIORAL DISORDERS
EC	BEHAVIORAL DISORDERS
EC	BEHAVIORAL OBJECTIVES
IR	BEHAVIORAL OBJECTIVES
PS	BEHAVIORAL OBJECTIVES
SP	BEHAVIORAL OBJECTIVES
TM	BEHAVIORAL OBJECTIVES (ASSESSING/MEASURING ATTAINMENT)
JC	BEHAVIORAL OBJECTIVES (JUNIOR COLLEGES)
PS	BEHAVIORAL SCIENCE RESEARCH
SO	BEHAVIORAL SCIENCE RESEARCH
SO	BEHAVIORAL SCIENCES
CG	BELIEFS
IR	BIBLIOGRAPHIC CITATIONS
IR	BIBLIOGRAPHIC COUPLING
IR	BIBLIOGRAPHY
RC	BICULTURALISM
FL	BILINGUAL EDUCATION
RC	BILINGUAL EDUCATION
CS	BILINGUAL EDUCATION (RE: TESOL)
FL	BILINGUALISM
RC	BILINGUALISM
CS	BILINGUALISM (RE: TESOL)
SE	BIOCHEMISTRY
TM	BIOGRAPHICAL INVENTORIES
CS	BIOGRAPHIES
EC	BIOLOGICAL INFLUENCES
SE	BIOLOGICAL INFLUENCES
SE	BIOLOGICAL SCIENCES
SE	BIOLOGY
SE	BIOLOGY INSTRUCTION
IR	BIONICS
SE	BIOPHYSICS
UD	BIRACIAL SCHOOLS
EC	BIRTH ORDER
PS	BIRTH ORDER
UD	BLACK COMMUNITY
CG	BLACK POWER
UD	BLACK POWER
HE	BLACK STUDENTS (COLLEGES AND UNIVERSITIES)
SO	BLACK STUDIES
UD	BLACK STUDIES
EC	BLIND CHILDREN
CE	BLUE COLLAR OCCUPATIONS
EA	BOARD OF EDUCATION POLICY/ROLE
SP	BOARD OF EDUCATION POLICY/ROLE
EC	BOARD OF EDUCATION POLICY/ROLE (SPECIAL EDUCATION)
EA	BOND ISSUES
IR	BOOK CATALOGS
IR	BOOK MATERIALS
IR	BOOK THEFTS
CE	BOOKKEEPING
IR	BOOKLISTS
IR	BOOKMOBILES
IR	BOOKS
SE	BOTANY
RC	BRACEROS
IR	BRANCH LIBRARIES
IR	BRANCHING
IR	BROADCAST INDUSTRY
IR	BROADCAST MEDIA
IR	BROADCAST RECEPTION EQUIPMENT
IR	BROADCAST TELEVISION
EA	BUDGETS/BUDGETING
EA	BUILDING DESIGN
EA	BUILDING EQUIPMENT
EC	BUILDING EQUIPMENT (SPECIAL EDUCATION)
EA	BUILDING IMPROVEMENT
EA	BUILDING INNOVATION
EA	BUILDING MATERIALS
EA	BUILDING OBSOLESCENCE
EA	BUILDING OPERATION
EA	BUILDING PLANS
CE	BUILDING TRADES
EA	BUILDINGS (EDUCATIONAL FACILITIES)
IR	BULLETIN BOARDS
EA	BUREAUCRACY
EC	BUS TRANSPORTATION (FOR HANDICAPPED)
EA	BUS TRANSPORTATION (TO SCHOOLS)
CE	BUSINESS
CE	BUSINESS EDUCATION
CE	BUSINESS RESPONSIBILITY
IR	CABLE TELEVISION (CATV)
SE	CALCULUS
RC	CAMPING
EA	CAPITAL OUTLAY (FOR FIXED ASSETS)
CE	CAREER CHANGE
CG	CAREER CHOICE
CE	CAREER CHOICE
CE	CAREER EDUCATION
CE	CAREER LADDERS
CE	CAREER OPPORTUNITIES
CG	CAREER PLANNING
CE	CAREERS
IR	CARRELS
IR	CARTOONS
CG	CASE STUDIES (RELATING TO EDUCATION & COUNSELING)
IR	CATALOGS/CATALOGING
SE	CELL THEORY
CS	CENSORSHIP
IR	CENSORSHIP (LIBRARY MATERIALS SELECTION, INFO. DISS.)
IR	CENTERS OF INTEREST
CS	CEREBRAL DOMINANCE
EC	CEREBRAL DOMINANCE
CG	CERTIFICATION
SP	CERTIFICATION (TEACHER CERTIFICATION)
IR	CHALKBOARDS
CG	CHANGE AGENTS
EC	CHANGE AGENTS
SP	CHANGE AGENTS
CE	CHANGING ATTITUDES
CG	CHANGING ATTITUDES
EC	CHANGING ATTITUDES
SP	CHANGING ATTITUDES
UD	CHANGING ATTITUDES
EC	CHARACTER DISORDERS
CS	CHARACTER RECOGNITION
IR	CHARTS
SE	CHARTS
SE	CHEMICAL ANALYSIS
SE	CHEMICAL BONDING
SE	CHEMICAL EQUILIBRIUM
SE	CHEMICAL REACTIONS
SE	CHEMICAL TECHNICIANS
SE	CHEMISTRY
SE	CHEMISTRY INSTRUCTION
SE	CHEMISTRY TEACHERS
RC	CHICANOS
EA	CHIEF ADMINISTRATORS
EC	CHILD ABUSE
PS	CHILD ABUSE
EC	CHILD ATTITUDES
EC	CHILD CARE
PS	CHILD CARE
EC	CHILD CARE CENTERS
PS	CHILD CARE CENTERS
CE	CHILD CARE OCCUPATIONS
EC	CHILD CARE OCCUPATIONS
CE	CHILD CARE WORKERS
PS	CHILD CARE WORKERS

CG	CHILD DEVELOPMENT
EC	CHILD DEVELOPMENT
PS	CHILD DEVELOPMENT
UD	CHILD DEVELOPMENT
SO	CHILD DEVELOPMENT (AS PART OF PSYCHOLOGY)
EC	CHILD DEVELOPMENT CENTERS
PS	CHILD DEVELOPMENT CENTERS
CS	CHILD LANGUAGE
EC	CHILD PSYCHOLOGY
PS	CHILD PSYCHOLOGY
SO	CHILD PSYCHOLOGY
EC	CHILD REARING
PS	CHILD REARING
EC	CHILD WELFARE
PS	CHILD WELFARE
PS	CHILDHOOD ATTITUDES
EC	CHILDHOOD NEEDS
PS	CHILDHOOD NEEDS
PS	CHILDREN (GENERAL)
EC	CHILDREN, EXCEPTIONAL
CS	CHILDRENS BOOKS
IR	CHILDRENS GAMES
FL	CHINESE
CS	CHORAL SPEAKING
SE	CHROMATOGRAPHY
CE	CHURCH SPONSORED ADULT EDUCATION
IR	CITATION INDEXES
CE	CITIZEN PARTICIPATION
SO	CITIZENSHIP
SO	CIVICS
SO	CIVIL LIBERTIES
EA	CIVIL RIGHTS
SO	CIVIL RIGHTS
UD	CIVIL RIGHTS
CG	CIVIL RIGHTS (STUDENTS,MINORITIES,SCHOOL ROLE)
EA	CIVIL RIGHTS LEGISLATION
FL	CLASSICAL LANGUAGES
IR	CLASSIFICATION
EC	CLASSIFICATION (LABELING)
SE	CLASSIFICATION (SCIENCE)
EA	CLASSROOM DESIGN
EC	CLASSROOM DESIGN (SPECIAL EDUCATION)
CG	CLASSROOM ENVIRONMENT
SP	CLASSROOM ENVIRONMENT
UD	CLASSROOM ENVIRONMENT
EC	CLASSROOM ENVIRONMENT (SPECIAL EDUCATION)
EA	CLASSROOM FURNITURE
EC	CLASSROOM FURNITURE (SPECIAL EQUIPMENT)
IR	CLASSROOM GAMES
CG	CLASSROOM GUIDANCE PROGRAMS
EC	CLASSROOM GUIDANCE PROGRAMS (SPECIAL EDUCATION)
IR	CLASSROOM LIBRARIES
PS	CLASSROOM OBSERVATION TECHNIQUES
SP	CLASSROOM OBSERVATION TECHNIQUES
TM	CLASSROOM OBSERVATION TECHNIQUES (EVALUATION)
IR	CLEARINGHOUSES
CE	CLERGYMEN
EA	CLIMATE CONTROL
SP	CLINICAL PROFESSORS
IR	CLOSED CIRCUIT TELEVISION
CS	CLOZE PROCEDURE
TM	CLOZE PROCEDURE
IR	CODIFICATION
UD	COGNITIVE ABILITY
CG	COGNITIVE DEVELOPMENT
CS	COGNITIVE DEVELOPMENT
EC	COGNITIVE DEVELOPMENT
PS	COGNITIVE DEVELOPMENT
UD	COGNITIVE DEVELOPMENT
EC	COGNITIVE FUNCTIONING (EXCEPTIONAL CHILDREN)
TM	COGNITIVE MEASUREMENT
IR	COGNITIVE OBJECTIVES
CS	COGNITIVE PROCESSES
EC	COGNITIVE PROCESSES
PS	COGNITIVE PROCESSES
TM	COGNITIVE TESTS
EA	COLLECTIVE BARGAINING/NEGOTIATION
JC	COLLEGE ADMINISTRATION (JUNIOR COLLEGES)
HE	COLLEGE ADMISSION (HIGHER EDUCATION)
HE	COLLEGE AND UNIVERSITY ENVIRONMENT
HE	COLLEGE AND UNIVERSITY STUDENTS
CG	COLLEGE ATTENDANCE
CG	COLLEGE BOUND STUDENTS
HE	COLLEGE BOUND STUDENTS
CG	COLLEGE CHOICE
HE	COLLEGE COMMUNITY RELATIONSHIPS
SP	COLLEGE COMMUNITY RELATIONSHIPS
HE	COLLEGE CONDITIONS AND PROBLEMS
HE	COLLEGE CURRICULUM
HE	COLLEGE DISSIDENTS
HE	COLLEGE DROPOUTS
TM	COLLEGE ENTRANCE EXAMINATIONS
CG	COLLEGE ENVIRONMENT
JC	COLLEGE ENVIRONMENT (JUNIOR COLLEGES)
CE	COLLEGE GRADUATES
IR	COLLEGE LIBRARIES
SE	COLLEGE MATHEMATICS
JC	COLLEGE PLANNING (JUNIOR COLLEGES)
HE	COLLEGE PREPARATION
JC	COLLEGE ROLE (JUNIOR COLLEGES)
SP	COLLEGE SCHOOL COOPERATION
SE	COLLEGE SCIENCE
HE	COLLEGE STUDENT ORGANIZATIONS
CG	COLLEGE STUDENTS
HE	COLLEGE STUDENTS
SP	COLLEGE SUPERVISORS
JC	COLLEGE TEACHERS (JUNIOR COLLEGES)
HE	COLLEGES
CS	COLOR
IR	COLOR PRESENTATION
IR	COLOR TELEVISION
IR	COMMERCIAL TELEVISION
CS	COMMUNICATION (THOUGHT TRANSFER IN INTERPERSONAL)
CG	COMMUNICATION (THOUGHT TRANSFER)
EC	COMMUNICATION (THOUGHT TRANSFER)
FL	COMMUNICATION (THOUGHT TRANSFER)
EC	COMMUNICATION DISORDERS
IR	COMMUNICATION SATELLITES
CS	COMMUNICATION, VERBAL
EC	COMMUNICATION, VERBAL
PS	COMMUNICATION, VERBAL
FL	COMMUNICATION, VERBAL (SECOND LANGUAGES)
IR	COMMUNICATIONS (TECHNOLOGY)
SO	COMMUNISM
CE	COMMUNITY ACTION
SO	COMMUNITY ACTION
HE	COMMUNITY AND URBAN PROGRAMS
EC	COMMUNITY AND URBAN PROGRAMS (SPECIAL EDUCATION)
IR	COMMUNITY ANTENNAS
JC	COMMUNITY COLLEGES
PS	COMMUNITY CONTROL
UD	COMMUNITY CONTROL
RC	COMMUNITY DEVELOPMENT
CE	COMMUNITY LEADERS
SP	COMMUNITY RESOURCE VOLUNTEERS
EC	COMMUNITY RESOURCE VOLUNTEERS (SPECIAL EDUCATION)
PS	COMMUNITY RESOURCES
SO	COMMUNITY RESOURCES
EA	COMMUNITY SCHOOL DIRECTORS
HE	COMMUNITY SCHOOL RELATIONSHIP
SP	COMMUNITY SCHOOL RELATIONSHIP
HE	COMMUNITY SERVICE PROGRAMS
PS	COMMUNITY SERVICE PROGRAMS
CE	COMMUNITY SERVICES
EC	COMMUNITY SERVICES
PS	COMMUNITY SERVICES
JC	COMMUNITY SERVICES (JUNIOR COLLEGES)
SO	COMMUNITY STUDIES
SO	COMPARATIVE EDUCATION
PS	COMPENSATORY EDUCATION
UD	COMPENSATORY EDUCATION
JC	COMPENSATORY EDUCATION (JUNIOR COLLEGES)
RC	COMPENSATORY EDUCATION (RURAL AREAS)
PS	COMPENSATORY EDUCATION PROGRAMS
UD	COMPENSATORY EDUCATION PROGRAMS
HE	COMPENSATORY PROGRAMS (COLLEGES AND UNIVERSITIES)
CS	COMPOSITION
CS	COMPOSITION (LITERARY)
FL	COMPOSITION (LITERARY, IN FOREIGN LANGUAGE)
CS	COMPOSITION SKILLS (LITERARY)
FL	COMPOSITION SKILLS (LITERARY, IN FOREIGN LANGUAGE)
FL	COMPUTATIONAL LINGUISTICS
IR	COMPUTATIONAL LINGUISTICS (LIBRARY AND INFO. CTR. PROC.)
IR	COMPUTER ASSISTED INSTRUCTION
IR	COMPUTER BASED LABORATORIES
IR	COMPUTER GRAPHICS
SE	COMPUTER ORIENTED PROGRAMS
IR	COMPUTER ORIENTED PROGRAMS(LIBRARY AND INFO. CTR. PROC)
IR	COMPUTER OUTPUT MICROFILM
IR	COMPUTER PRINT FORMATS
IR	COMPUTER PROGRAMS (LIBRARY AND INFO. CTR. PROC.)
IR	COMPUTER SCIENCE
IR	COMPUTER SCIENCE EDUCATION
IR	COMPUTER SPECIALISTS
IR	COMPUTER STORAGE DEVICES
IR	COMPUTER SYSTEMS
IR	COMPUTER TECHNOLOGY
SE	COMPUTERS
IR	COMPUTERS
SE	CONCEPT DEVELOPMENT (SCIENCE AND MATHEMATICS EDUCATION)
CG	CONCEPT FORMATION
EC	CONCEPT FORMATION
PS	CONCEPT FORMATION
IR	CONCORDANCES
CG	CONFIDENTIAL RECORDS
CG	CONFIDENTIALITY
CE	CONFLICT RESOLUTION
CG	CONFLICT RESOLUTION
SE	CONGRUENCE
SE	CONSERVATION (CONCEPT)
FL	CONSONANTS
HE	CONSORTIA
SO	CONSTITUTIONAL HISTORY
EA	CONSTRUCTION (EDUCATIONAL FACILITIES)
EA	CONSTRUCTION COSTS
EA	CONSTRUCTION MANAGEMENT
CG	CONSULTATION PROGRAMS
EC	CONSULTATION PROGRAMS
SO	CONSUMER ECONOMICS
CE	CONSUMER EDUCATION

SO	CONSUMER EDUCATION (AS PART OF SOCIAL STUDIES,
IR	CONTENT ANALYSIS
CS	CONTENT READING
CS	CONTEXT CLUES
CE	CONTINUING EDUCATION (ADULTS)
HE	CONTINUING EDUCATION (FORMAL POST GRADUATE)
CE	CONTINUING EDUCATION (PROFESSIONS)
CE	CONTINUOUS LEARNING
IR	CONTINUOUS PROGRESS PLAN
EA	CONTINUOUS PROGRESS PLAN (NONGRADED SCHOOL)
CG	CONTRACEPTION
EA	CONTRACT SALARIES
EA	CONTRACTS (TEACHER)
FL	CONTRASTIVE LINGUISTICS
EA	CONTROLLED ENVIRONMENT
SP	COOPERATING TEACHERS
CE	COOPERATIVE EDUCATION
JC	COOPERATIVE EDUCATION (JUNIOR COLLEGES)
IR	COORDINATE INDEXES
IR	COPYRIGHT
HE	CORE CURRICULUM
CE	CORRECTIONAL EDUCATION
CE	CORRECTIVE INSTITUTIONS
CS	CORRECTIVE READING
EC	CORRECTIVE READING (SPECIAL EDUCATION)
EC	CORRELATION
TM	CORRELATION
CE	CORRESPONDENCE SCHOOLS
CE	CORRESPONDENCE STUDY
CE	COST EFFECTIVENESS
CG	COUNSELING
EC	COUNSELING
JC	COUNSELING (JUNIOR COLLEGES)
CG	COUNSELING EFFECTIVENESS
CG	COUNSELING SERVICES
EC	COUNSELING SERVICES (SPECIAL EDUCATION)
CG	COUNSELING THEORIES
CG	COUNSELOR CERTIFICATION
CG	COUNSELOR CHARACTERISTICS
CG	COUNSELOR EDUCATORS
CG	COUNSELOR FUNCTION
CG	COUNSELOR PERFORMANCE
EC	COUNSELOR PERFORMANCE (SPECIAL EDUCATION)
CG	COUNSELOR ROLE
EC	COUNSELOR ROLE (SPECIAL EDUCATION)
CG	COUNSELOR TRAINING
CG	COUNSELORS
IR	COUNTY LIBRARIES
HE	COURSE EVALUATION
TM	COURSE EVALUATION
EA	COURT CASES
EA	COURT LITIGATION
UD	COURT LITIGATION
IR	COVERT RESPONSES
CS	CREATIVE DRAMATICS
EC	CREATIVE DRAMATICS (SPECIAL EDUCATION)
CS	CREATIVE THINKING
CS	CREATIVE WRITING
EC	CREATIVITY
PS	CREATIVITY
TM	CREATIVITY TESTS
CE	CREDIT COURSES
EC	CRIPPLED CHILDREN
TM	CRITERION REFERENCED TESTS
IR	CRITICAL PATH METHOD
CS	CRITICAL READING
CS	CRITICAL THINKING
SP	CROSS AGE TEACHING
CG	CROSS CULTURAL STUDIES
SO	CROSS CULTURAL STUDIES
UD	CROSS CULTURAL STUDIES
SP	CROSS CULTURAL TRAINING
SO	CROSS CULTURAL TRAINING (CULTURAL AWARENESS)
UD	CULTURAL AWARENESS
RC	CULTURAL BACKGROUND
UD	CULTURAL BACKGROUND
FL	CULTURAL CONTEXT
SO	CULTURAL CONTEXT
CE	CULTURAL DIFFERENCES
RC	CULTURAL DIFFERENCES
UD	CULTURAL DIFFERENCES
RC	CULTURAL DISADVANTAGEMENT
UD	CULTURAL DISADVANTAGEMENT
FL	CULTURAL EDUCATION
SO	CULTURAL EDUCATION
SO	CULTURAL EXCHANGE
CE	CULTURALLY DISADVANTAGED
CG	CULTURALLY DISADVANTAGED
PS	CULTURALLY DISADVANTAGED
CS	CULTURALLY DISADVANTAGED (RE: TENL)
RC	CULTURALLY DISADVANTAGED (RURAL AREAS)
UD	CULTURALLY DISADVANTAGED (URBAN AREAS)
PS	CULTURE CONFLICT
RC	CULTURE CONFLICT
SO	CULTURE CONFLICT
UD	CULTURE CONFLICT
TM	CULTURE FREE TESTS
IR	CURRENT AWARENESS SYSTEMS
SO	CURRENT EVENTS
SP	CURRICULUM
SP	CURRICULUM DESIGN
CS	CURRICULUM DESIGN (LANGUAGE)
EA	CURRICULUM DESIGN (POLICY)
PS	CURRICULUM DESIGN (PRESCHOOL EDUCATION)
EC	CURRICULUM DESIGN (SPECIAL EDUCATION)
SO	CURRICULUM DESIGN (THEORY)
SP	CURRICULUM DEVELOPMENT
UD	CURRICULUM DEVELOPMENT
EA	CURRICULUM DEVELOPMENT (GENERAL)
JC	CURRICULUM DEVELOPMENT (JUNIOR COLLEGES)
FL	CURRICULUM DEVELOPMENT (LANGUAGE TEACHING)
CS	CURRICULUM DEVELOPMENT (LANGUAGE)
PS	CURRICULUM DEVELOPMENT (PRESCHOOL EDUCATION)
SE	CURRICULUM DEVELOPMENT (SCIENCE AND MATHEMATICS)
EC	CURRICULUM DEVELOPMENT (SPECIAL EDUCATION)
SO	CURRICULUM DEVELOPMENT (THEORY)
CS	CURRICULUM EVALUATION (LANGUAGE)
HE	CURRICULUM GUIDES
SP	CURRICULUM GUIDES
CS	CURRICULUM GUIDES (ENGLISH LANGUAGE)
PS	CURRICULUM GUIDES (PRESCHOOL EDUCATION)
EC	CURRICULUM GUIDES (SPECIAL EDUCATION)
UD	CURRICULUM IMBALANCE
EA	CURRICULUM PLANNING
UD	CURRICULUM PLANNING
EC	CURRICULUM PLANNING (SPECIAL EDUCATION)
IR	CYBERNETICS
SE	CYTOLOGY
SP	DANCE (PHSYICAL EDUCATION)
IR	DATA
IR	DATA ANALYSIS
IR	DATA BASES
IR	DATA COLLECTION
IR	DATA PROCESSING
PS	DAY CARE PROGRAMS
EC	DAY CARE PROGRAMS (HANDICAPPED)
CE	DAY CARE PROGRAMS (STAFFING)
PS	DAY CARE SERVICES
EC	DAY CARE SERVICES (HANDICAPPED)
CE	DAYTIME PROGRAMS
EC	DEAF CHILDREN
EA	DECENTRALIZATION
UD	DECENTRALIZATION
IR	DECENTRALIZED LIBRARY SYSTEMS
SE	DECIMAL FRACTIONS
CG	DECISION MAKING
EA	DECISION MAKING
SO	DECISION MAKING
TM	DECISION MAKING (EVALUATING EFFECTIVENESS/PROCESSES)
CS	DECODING (READING)
SE	DEDUCTIVE METHODS
SO	DEDUCTIVE METHODS
FL	DEEP STRUCTURE
CS	DEEP STRUCTURE (ENGLISH)
HE	DEGREE REQUIREMENTS
HE	DEGREES (TITLES)
EA	DEGREES GRANTED (STATISTICAL STUDIES)
CG	DELINQUENT REHABILITATION
EA	DEMOGRAPHY
PS	DEMOGRAPHY
SO	DEMOGRAPHY
CE	DEMONSTRATION (CIVIL)
CE	DEMONSTRATIONS (EDUCATIONAL)
IR	DEPOSITORY LIBRARIES
UD	DEPRESSED AREAS (GEOGRAPHIC)
FL	DESCRIPTIVE LINGUISTICS
CS	DESCRIPTIVE WRITING
UD	DESEGREGATION
CG	DESENSITIZATION
SO	DEVELOPED NATIONS
SO	DEVELOPING NATIONS
CG	DEVELOPMENTAL GUIDANCE
JC	DEVELOPMENTAL PROGRAMS (JUNIOR COLLEGES)
CS	DEVELOPMENTAL READING
EC	DEVELOPMENTAL READING (HANDICAPPED)
CS	DIACHRONIC LINGUISTICS
FL	DIACHRONIC LINGUISTICS (FOREIGN LANGUAGES)
CS	DIAGNOSTIC TEACHING
EC	DIAGNOSTIC TEACHING
TM	DIAGNOSTIC TESTS
IR	DIAGRAMS
IR	DIAL ACCESS INFORMATION SYSTEMS
FL	DIALECT INTERFERENCE
FL	DIALECT STUDIES
CS	DIALECT STUDIES (COMMUNICATION)
FL	DIALECTS
CS	DIALECTS (RE: TEACHING ENGLISH AND READING)
IR	DICTIONARIES
IR	DICTIONARY CATALOGS
EA	DIFFERENTIATED STAFFS
SP	DIFFERENTIATED STAFFS
SO	DIFFUSION
IR	DIGITAL COMPUTERS
EA	DINING FACILITIES
CS	DIRECTED READING ACTIVITY
UD	DISADVANTAGED ADULTS
UD	DISADVANTAGED ENVIRONMENT/EXPERIENCE
CE	DISADVANTAGED GROUPS
EC	DISADVANTAGED GROUPS
UD	DISADVANTAGED GROUPS

RC	DISADVANTAGED RURAL POPULATIONS
RC	DISADVANTAGED SMALL SCHOOL POPULATIONS
CE	DISADVANTAGED YOUTH
CG	DISADVANTAGED YOUTH
EC	DISADVANTAGED YOUTH
PS	DISADVANTAGED YOUTH
RC	DISADVANTAGED YOUTH
UD	DISADVANTAGED YOUTH
JC	DISADVANTAGED YOUTH (JUNIOR COLLEGES)
EA	DISCIPLINE POLICY
EA	DISCIPLINE PROBLEMS
EC	DISCIPLINE PROBLEMS
PS	DISCOVERY LEARNING
SO	DISCOVERY LEARNING
SP	DISCOVERY LEARNING
SE	DISCRIMINANT ANALYSIS
UD	DISCRIMINATION
CS	DISCRIMINATION LEARNING
EC	DISCRIMINATION LEARNING
PS	DISCRIMINATION LEARNING
EA	DISCRIMINATORY LEGISLATION
EC	DISCRIMINATORY LEGISLATION
SO	DISCUSSION (TEACHING TECHNIQUE)
SP	DISCUSSION (TEACHING TECHNIQUE)
CE	DISCUSSION GROUPS
CS	DISCUSSION GROUPS (SPEECH)
IR	DISPLAY PANELS
IR	DISPLAY SYSTEMS
IR	DISSEMINATION OF INFORMATION
SO	DISSENT
FL	DISTINCTIVE FEATURES
CE	DISTRIBUTIVE EDUCATION
IR	DIVIDED CATALOGS
SE	DIVISION
HE	DOCTORAL THESES
IR	DOCUMENT ANALYSTS
IR	DOCUMENTALISTS
IR	DOCUMENTARIES
IR	DOCUMENTATION
CG	DOGMATISM
CE	DRAFTING
CS	DRAMA/DRAMATICS
EC	DRAMA/DRAMATICS (SPECIAL EDUCATION)
CG	DROPOUT IDENTIFICATION
CG	DROPOUT PREVENTION
EC	DROPOUT PREVENTION
JC	DROPOUT RESEARCH (JUNIOR COLLEGES)
EC	DROPOUTS
UD	DROPOUTS
HE	DROPOUTS (COLLEGE AND UNIVERSITIES)
FL	DROPOUTS (STUDENTS WHO DISCONTINUE LANGUAGE STUDY)
CG	DRUG ABUSE
EC	DRUG ABUSE
SO	DRUG ABUSE
CG	DRUG EDUCATION
EA	DRUG LEGISLATION
IR	DUBBING
CS	DYSLEXIA
EC	DYSLEXIA
PS	EARLY CHILDHOOD
EC	EARLY CHILDHOOD (HANDICAPPED AND GIFTED)
PS	EARLY CHILDHOOD EDUCATION
EC	EARLY CHILDHOOD EDUCATION (SPECIAL EDUCATION)
PS	EARLY EXPERIENCE
CS	EARLY READING
EC	EARLY READING (GIFTED)
SE	EARTH SCIENCES
SE	ECOLOGY
UD	ECONOMIC DISCRIMINATION
SO	ECONOMIC EDUCATION
CG	ECONOMICALLY DISADVANTAGED
RC	ECONOMICALLY DISADVANTAGED (RURAL AREAS)
SE	ECONOMICS (GENERAL)
SO	ECONOMICS (GENERAL) (AS PART OF SOCIAL STUDIES)
IR	ECONOMICS OF INFORMATION
IR	ECONOMICS OF PUBLICATION
SO	EDUCATION
SP	EDUCATION (GENERAL)
EA	EDUCATION (HISTORICAL STUDIES)
SP	EDUCATION COURSES
IR	EDUCATION FOR LIBRARIES
EA	EDUCATION VOUCHERS
EA	EDUCATIONAL ACCOUNTABILITY
SP	EDUCATIONAL ACCOUNTABILITY
TM	EDUCATIONAL ACCOUNTABILITY
JC	EDUCATIONAL ACCOUNTABILITY (JUNIOR COLLEGES)
EA	EDUCATIONAL ADMINISTRATION
HE	EDUCATIONAL ADMINISTRATION (HIGHER EDUCATION)
CE	EDUCATIONAL BACKGROUND
CE	EDUCATIONAL BENEFITS
CE	EDUCATIONAL CERTIFICATES
SO	EDUCATIONAL CHANGE
SP	EDUCATIONAL CHANGE (INNOVATIONS)
PS	EDUCATIONAL CHANGE (PRESCHOOL EDUCATION)
EC	EDUCATIONAL CHANGE (SPECIAL EDUCATION)
IR	EDUCATIONAL DIAGNOSIS
RC	EDUCATIONAL DISADVANTAGEMENT
UD	EDUCATIONAL DISCRIMINATION
EA	EDUCATIONAL ECONOMICS
SO	EDUCATIONAL ECONOMICS
EA	EDUCATIONAL FACILITIES
HE	EDUCATIONAL FACILITIES (HIGHER EDUCATION)
JC	EDUCATIONAL FACILITIES (JUNIOR COLLEGES)
EC	EDUCATIONAL FACILITIES (SPECIAL EDUCATION)
EA	EDUCATIONAL FINANCE
JC	EDUCATIONAL FINANCE (JUNIOR COLLEGES)
IR	EDUCATIONAL GAMES
SO	EDUCATIONAL HISTORY
SO	EDUCATIONAL IMPROVEMENT
TM	EDUCATIONAL IMPROVEMENT
SP	EDUCATIONAL IMPROVEMENT (NEW PROGRAMS)
EC	EDUCATIONAL IMPROVEMENT (SPECIAL EDUCATION)
CE	EDUCATIONAL INNOVATION
SO	EDUCATIONAL INNOVATION
SP	EDUCATIONAL INNOVATION
UD	EDUCATIONAL INNOVATION
EA	EDUCATIONAL INNOVATION
JC	EDUCATIONAL INNOVATION (JUNIOR COLLEGES)
PS	EDUCATIONAL INNOVATION (PRESCHOOL EDUCATION)
CE	EDUCATIONAL LEGISLATION
EA	EDUCATIONAL LEGISLATION
EC	EDUCATIONAL LEGISLATION
JC	EDUCATIONAL LEGISLATION (JUNIOR COLLEGES)
IR	EDUCATIONAL MEDIA
EC	EDUCATIONAL MEDIA (SPECIAL EDUCATION)
CE	EDUCATIONAL MEDIA PROGRAMS FOR ADULTS
CE	EDUCATIONAL NEEDS
RC	EDUCATIONAL NEEDS
JC	EDUCATIONAL NEEDS (JUNIOR COLLEGE STUDENTS)
SO	EDUCATIONAL OBJECTIVES
TM	EDUCATIONAL OBJECTIVES (EVALUATING THE ATTAINMENT OF)
JC	EDUCATIONAL OBJECTIVES (JUNIOR COLLEGES)
EA	EDUCATIONAL ORGANIZATIONS
EA	EDUCATIONAL PARKS
SO	EDUCATIONAL PHILOSOPHY
SP	EDUCATIONAL PHILOSOPHY
JC	EDUCATIONAL PHILOSOPHY (JUNIOR COLLEGES)
PS	EDUCATIONAL PHILOSOPHY (PRESCHOOL EDUCATION)
EC	EDUCATIONAL PHILOSOPHY (SPECIAL EDUCATION)
EA	EDUCATIONAL PLANNING
JC	EDUCATIONAL PLANNING (JUNIOR COLLEGES)
EC	EDUCATIONAL PLANNING (SPECIAL EDUCATION)
EA	EDUCATIONAL POLICY
EC	EDUCATIONAL POLICY (SPECIAL EDUCATION)
EA	EDUCATIONAL PROGRAMS
EC	EDUCATIONAL PROGRAMS (SPECIAL EDUCATION)
SO	EDUCATIONAL PSYCHOLOGY
EC	EDUCATIONAL PSYCHOLOGY (SPECIAL EDUCATION)
IR	EDUCATIONAL RADIO
SO	EDUCATIONAL RESEARCH
SP	EDUCATIONAL RESEARCH/RESEARCHERS
CE	EDUCATIONAL RESEARCHERS
SO	EDUCATIONAL SOCIOLOGY
IR	EDUCATIONAL TECHNOLOGY
EC	EDUCATIONAL TECHNOLOGY (SPECIAL EDUCATION)
IR	EDUCATIONAL TELEVISION
SO	EDUCATIONAL THEORY
SP	EDUCATIONAL THEORY
UD	EDUCATIONALLY DISADVANGATED
SP	EDUCATORS (GENERAL)
SO	EFFECTIVE TEACHING
SP	EFFECTIVE TEACHING
CS	ELECTIVE READING
CE	ELECTRIC CIRCUITS
CE	ELECTRICITY
IR	ELECTROMECHANICAL AIDS
IR	ELECTRONIC DATA PROCESSING
IR	ELECTRONIC EQUIPMENT
CE	ELECTRONICS
SE	ELECTRONICS
CG	ELEMENTARY SCHOOL COUNSELORS
CG	ELEMENTARY SCHOOL GUIDANCE
IR	ELEMENTARY SCHOOL LIBRARIES
SE	ELEMENTARY SCHOOL MATHEMATICS
SE	ELEMENTARY SCHOOL SCIENCE
CG	ELEMENTARY SCHOOL STUDENTS
PS	ELEMENTARY SCHOOL STUDENTS
EA	ELEMENTARY SCHOOL SUPERVISORS
SP	ELEMENTARY SCHOOL TEACHERS
SE	EMBRYOLOGY
PS	EMOTIONAL DEVELOPMENT
CG	EMOTIONAL DEVELOPMENT (OF STUDENTS)
EC	EMOTIONALLY DISTURBED CHILDREN
CG	EMPATHY
CE	EMPLOYEE ATTITUDES
CE	EMPLOYER EMPLOYEE RELATIONSHIP
CS	EMPLOYER EMPLOYEE RELATIONSHIP (COMMUNICATION)
CE	EMPLOYMENT
EC	EMPLOYMENT (HANDICAPPED)
EA	EMPLOYMENT INTERVIEWS
CE	EMPLOYMENT OPPORTUNITIES
CG	EMPLOYMENT OPPORTUNITIES (CAREER PLANNING)
EC	EMPLOYMENT OPPORTUNITIES (HANDICAPPED)
CE	EMPLOYMENT PROGRAMS
EC	EMPLOYMENT PROGRAMS (HANDICAPPED)
CE	EMPLOYMENT PROJECTIONS
EC	EMPLOYMENT PROJECTIONS (HANDICAPPED)
CG	EMPLOYMENT SERVICES (COUNSELING)
CE	EMPLOYMENT STATISTICS
EC	EMPLOYMENT STATISTICS

SE	ENERGY
SE	ENGINEERING (GENERAL)
CE	ENGINEERS
CS	ENGLISH
FL	ENGLISH AS A SECOND (OR FOREIGN) LANGUAGE
CS	ENGLISH CURRICULUM (ALL LEVELS)
CS	ENGLISH EDUCATION/INSTRUCTION
CS	ENGLISH LITERATURE
CS	ENGLISH MAJOR
CS	ENGLISH PROGRAMS
CS	ENGLISH SKILLS
CS	ENGLISH TEACHER PREPARATION
CE	ENLISTED MEN
EA	ENROLLMENT INFLUENCES
CG	ENROLLMENT OF STUDENTS (COUNSELING)
EA	ENROLLMENT OF STUDENTS (GENERAL)
EA	ENROLLMENT PROJECTIONS
EA	ENROLLMENT RATE
HE	ENROLLMENT TRENDS (HIGHER EDUCATION)
JC	ENROLLMENT TRENDS (JUNIOR COLLEGES)
EC	ENROLLMENT TRENDS (SPECIAL EDUCATION)
CE	ENTRY WORKERS
EA	ENVIRONMENT (FACILITY ASPECTS)
EC	ENVIRONMENT (FACILITY ASPECTS)
CG	ENVIRONMENT (HUMAN ASPECTS)
EC	ENVIRONMENT (HUMAN ASPECTS)
SO	ENVIRONMENTAL EDUCATION (AS PART OF SOCIAL STUDIES)
SE	ENVIRONMENTAL EDUCATION (SCIENCE)
CE	ENVIRONMENTAL INFLUENCES
CG	ENVIRONMENTAL INFLUENCES
PS	ENVIRONMENTAL INFLUENCES
UD	ENVIRONMENTAL INFLUENCES
TM	ENVIRONMENTAL MEASURES
UD	EQUAL EDUCATION
EA	EQUAL FACILITIES
CE	EQUAL OPPORTUNITIES (JOBS)
EA	EQUAL PROTECTION
EA	EQUALIZATION AID
IR	EQUIPMENT
EA	EQUIPMENT (EDUCATIONAL FACILITIES)
EC	EQUIPMENT (EDUCATIONAL FACILITIES)
PS	EQUIPMENT (EDUCATIONAL FACILITIES)
EA	EQUIPMENT UTILIZATION
CE	EQUIVALENCY TESTS
TM	EQUIVALENCY TESTS
CS	ERROR PATTERNS
RC	ESKIMOS
TM	ESSAY TESTS
SO	ETHICAL INSTRUCTION
PS	ETHNIC GROUPS
UD	ETHNIC GROUPS
FL	ETHNIC GROUPS (BILINGUAL EDUCATION,INCL. ENGLISH)
PS	ETHNIC MINORITIES
UD	ETHNIC MINORITIES
FL	ETHNIC MINORITIES (BILINGUAL EDUCATION, INCL. ENGLISH)
PS	ETHNIC RELATIONS
SO	ETHNIC RELATIONS
SO	ETHNIC STUDIES
UD	ETHNIC STUDIES
FL	ETHNOLINGUISTICS
SO	ETHNOLOGY
TM	EVALUATION
PS	EVALUATION (PRESCHOOL EDUCATION)
CG	EVALUATION (PSYCHOLOGICAL & INTELLECTUAL)
EC	EVALUATION (SPECIAL EDUCATION)
EA	EVALUATION CRITERIA
PS	EVALUATION CRITERIA
SP	EVALUATION CRITERIA
TM	EVALUATION CRITERIA
SP	EVALUATION METHODS/PROCEDURES/TECHNIQUES
CE	EVALUATION METHODS/PROCEDURES/TECHNIQUES
EC	EVALUATION METHODS/PROCEDURES/TECHNIQUES
TM	EVALUATION METHODS/PROCEDURES/TECHNIQUES
HE	EVENING COLLEGES
CE	EVENING PROGRAMS
SE	EVOLUTION
EC	EXCEPTIONAL CHILD EDUCATION
EC	EXCEPTIONAL CHILD RESEARCH
EC	EXCEPTIONAL CHILD SERVICES
EC	EXCEPTIONAL CHILDREN
FL	EXCHANGE PROGRAMS
IR	EXHIBITS
EA	EXPENDITURE PER STUDENT
EA	EXPENDITURES (EDUCATIONAL FINANCE)
HE	EXPERIMENTAL COLLEGES
JC	EXPERIMENTAL PROGRAMS (JUNIOR COLLEGES)
PS	EXPERIMENTAL PROGRAMS (PRESCHOOL EDUCATION)
EC	EXPERIMENTAL PROGRAMS (SPECIAL EDUCATION)
CE	EXPERIMENTAL PROGRAMS (VOCATIONAL AND ADULT)
CS	EXPOSITORY WRITING
EA	EXTENDED SCHOOL YEAR
CE	EXTENSION AGENTS
HE	EXTENSION PROGRAMS
CG	EXTRA-CURRICULAR ACTIVITY, STUDENT
CS	EYE FIXATIONS
EC	EYE MOVEMENTS
PS	EYE MOVEMENTS
CS	EYE MOVEMENTS (READING)
EA	FACILITIES (EDUCATIONAL)
EC	FACILITIES (EDUCATIONAL) (SPECIAL EDUCATION)
EA	FACILITY CASE STUDIES
EA	FACILITY EXPANSION
EA	FACILITY GUIDELINES
EA	FACILITY IMPROVEMENT
EA	FACILITY INVENTORY
EA	FACILITY REQUIREMENTS
EA	FACILITY UTILIZATION RESEARCH
IR	FACSIMILE COMMUNICATION SYSTEMS
TM	FACTOR ANALYSIS
TM	FACTOR STRUCTURE
HE	FACULTY
SP	FACULTY
CG	FACULTY ADVISORS
TM	FACULTY EVALUATION
EC	FAMILY (SOCIOLOGICAL UNIT)
PS	FAMILY (SOCIOLOGICAL UNIT)
SO	FAMILY (SOCIOLOGICAL UNIT)
EC	FAMILY CHARACTERISTICS
PS	FAMILY CHARACTERISTICS
CG	FAMILY CONSULTATIONS
CG	FAMILY COUNSELING
EC	FAMILY COUNSELING
CG	FAMILY ENVIRONMENT
EC	FAMILY ENVIRONMENT
PS	FAMILY ENVIRONMENT
CE	FAMILY LIFE EDUCATION
TM	FAMILY MEASUREMENT TECHNIQUES
CE	FAMILY PLANNING
RC	FARM WORKERS
CE	FARMERS
EA	FAST TRACK SCHEDULING
CE	FATHERS
EA	FEDERAL AID
UD	FEDERAL AID
HE	FEDERAL AID (HIGHER EDUCATION)
PS	FEDERAL AID (PRESCHOOL EDUCATION)
CE	FEDERAL AID (REHABILITATION)
EC	FEDERAL AID (SPECIAL EDUCATION)
EA	FEDERAL COURT LITIGATION
EA	FEDERAL LAWS
EA	FEDERAL LEGISLATION
UD	FEDERAL PROGRAMS (DISADVANTAGED)
PS	FEDERAL PROGRAMS (PRESCHOOL EDUCATION)
EC	FEDERAL PROGRAMS (SPECIAL EDUCATION)
CE	FEDERAL PROGRAMS (VOCATIONAL AND ADULT EDUCATION)
IR	FEEDBACK
CE	FEMALES
CG	FEMINISM
SO	FEMINISM
CS	FICTION
SP	FIELD EXPERIENCE PROGRAMS
SE	FIELD STUDIES
SE	FIELD TRIPS
IR	FILE ORGANIZATION AND SEARCH
IR	FILM LIBRARIES
CS	FILM PRODUCTION
IR	FILM PRODUCTION
CS	FILM STUDY
IR	FILM STUDY
IR	FILMS
CS	FILMS (COMMUNICATION)
IR	FILMSTRIPS
EA	FINANCE/FINANCING (SCHOOLS)
EA	FINANCIAL NEEDS
EC	FINANCIAL NEEDS
PS	FINANCIAL NEEDS
EA	FINANCIAL POLICY
EA	FINANCIAL PROBLEMS
EA	FINANCIAL SUPPORT
EC	FINANCIAL SUPPORT
PS	FINANCIAL SUPPORT
JC	FINANCIAL SUPPORT (JUNIOR COLLEGE STUDENTS)
CG	FINANCING STUDENTS EDUCATION
SP	FIRST AID (HEALTH EDUCATION)
EA	FISCAL CAPACITY
IR	FIXED SERVICE TELEVISION
FL	FLES
EA	FLEXIBLE FACILITIES
EC	FLEXIBLE FACILITIES (SPECIAL EDUCATION)
EA	FLEXIBLE PROGRESSION
EA	FLEXIBLE SCHEDULING
IR	FLEXIBLE SCHEDULING
CE	FLIGHT TRAINING
IR	FLOW CHARTS
CE	FOLK SCHOOLS
CS	FOLKLORE BOOKS
CE	FOLLOWUP STUDIES
JC	FOLLOWUP STUDIES (JUNIOR COLLEGE STUDENTS)
TM	FORCED CHOICE TECHNIQUE
SO	FOREIGN CULTURE
FL	FOREIGN LANGUAGE DOCUMENTS
IR	FOREIGN LANGUAGE FILMS
FL	FOREIGN LANGUAGES
SO	FOREIGN RELATIONS
HE	FOREIGN STUDENTS (COLLEGES AND UNIVERSITIES)
FL	FOREIGN STUDENTS (INTERNATIONAL EXCHANGES)
CG	FOREIGN STUDENTS (PROBLEMS & ADJUSTMENTS)
FL	FORM CLASSES (LANGUAGE)
TM	FORMATIVE EVALUATION
EA	FOUND SPACES

SO	FOUNDATIONS OF EDUCATION
SP	FOUNDATIONS OF EDUCATION
SE	FRACTIONS
CG	FRATERNITIES
FL	FRENCH
HE	FRESHMEN
EA	FULL STATE FUNDING
CE	FUNCTIONAL ILLITERACY
CE	FUNDAMENTAL AND LITERACY EDUCATION FOR ADULTS
EA	FUTURISM
IR	GAME THEORY
IR	GAMES
CE	GENERAL EDUCATION
JC	GENERAL EDUCATION (JUNIOR COLLEGES)
SE	GENERAL SCIENCE
EC	GENETICS
SE	GENETICS
SO	GEOGRAPHIC REGIONS
SO	GEOGRAPHY
SO	GEOGRAPHY INSTRUCTION
SE	GEOLOGY
SE	GEOMETRIC CONCEPTS
SE	GEOMETRY
SE	GEOPHYSICS
FL	GERMAN
CE	GERONTOLOGY
EC	GIFTED
CG	GIFTED (CHARACTERISTICS, COUNSELING)
EC	GIFTED CHILDREN
IR	GLOSSARIES
CG	GOALS (GENERAL)
EA	GOVERNANCE
HE	GOVERNANCE (COLLEGES AND UNIVERSITIES)
JC	GOVERNANCE (JUNIOR COLLEGES)
EA	GOVERNING BOARDS
HE	GOVERNING BOARDS (HIGHER EDUCATION)
SO	GOVERNMENT
CE	GOVERNMENT EMPLOYEES
IR	GOVERNMENT LIBRARIES
TM	GRADE EQUIVALENT SCALES/SCORES
HE	GRADE POINT AVERAGE
HE	GRADE PREDICTION
SP	GRADES
HE	GRADUATE EDUCATION
HE	GRADUATE STUDENTS
CE	GRADUATE STUDY
HE	GRADUATE STUDY
CP	GRADUATE SURVEYS
CS	GRAMMAR
FL	GRAMMAR
FL	GRAMMAR TRANSLATION METHOD
CS	GRAPHEMES
CE	GRAPHIC ARTS
IR	GRAPHIC ARTS
IR	GRAPHS
SE	GRAPHS
FL	GREEK
CG	GROUP COUNSELING
EC	GROUP COUNSELING (SPECIAL EDUCATION)
CE	GROUP DISCUSSION
CE	GROUP DYNAMICS
CS	GROUP DYNAMICS (COMMUNICATION)
CG	GROUP DYNAMICS (COUNSELING)
PS	GROUP DYNAMICS (PRESCHOOL EDUCATION)
EC	GROUP DYNAMICS (SPECIAL EDUCATION)
TM	GROUP INTELLIGENCE TESTING/TESTS
CS	GROUP READING
CS	GROUP RELATIONS
CS	GROUP STRUCTURE (COMMUNICATION)
TM	GROUP TESTS
CG	GROUP WORK
CS	GROUPING (INSTRUCTIONAL PURPOSES)
PS	GROUPING (INSTRUCTIONAL PURPOSES) (PRESCHOOL EDUCATION)
EC	GROUPING (INSTRUCTIONAL PURPOSES) (SPECIAL EDUCATION)
CG	GUIDANCE
EC	GUIDANCE (SPECIAL EDUCATION)
CG	GUIDANCE OBJECTIVES
CG	GUIDANCE SERVICES
CP	HANDICAPPED ADULT TRAINING PROGRAMS
EC	HANDICAPPED CHILDREN
CS	HANDWRITING SKILLS
PS	HEAD START PROJECT
EC	HEAD START PROJECT (HANDICAPPED)
CE	HEADS OF HOUSEHOLDS
SP	HEALTH EDUCATION
CE	HEALTH OCCUPATIONS EDUCATION
CE	HEALTH PERSONNEL
CG	HEALTH SERVICES, SCHOOL
CS	HEARING
EC	HEARING ABNORMALITIES
IR	HIERARCHICAL CLASSIFICATION
CS	HIGH INTEREST LOW VOCABULARY BOOKS
EC	HIGH INTEREST LOW VOCABULARY BOOKS
EA	HIGH SCHOOL ORGANIZATION
CG	HIGH SCHOOL STUDENTS
EA	HIGH SCHOOL SUPERVISORS
HE	HIGHER EDUCATION
FL	HINDI
EA	HISTORICAL STUDIES OF EDUCATION
SO	HISTORY
SO	HISTORY INSTRUCTION
IR	HOLOGRAPHY
CE	HOME ECONOMICS EDUCATION
EC	HOME PROGRAMS (HANDICAPPED)
PS	HOME PROGRAMS (PRESCHOOL EDUCATION)
EC	HOME VISITS (HANDICAPPED)
PS	HOME VISITS (PRESCHOOL EDUCATION)
CE	HOMEMAKING EDUCATION
HE	HONORS CURRICULUM
EC	HONORS CURRICULUM (GIFTED)
EA	HORIZONTAL ORGANIZATION
CE	HOUSEWIVES
SO	HUMAN RELATIONS
UD	HUMAN RELATIONS
CS	HUMAN RELATIONS (COMMUNICATION)
CE	HUMAN RELATIONS (REHABILITATION)
SO	HUMAN RELATIONS PROGRAMS
CG	HUMAN RELATIONS PROGRAMS (IN SCHOOL)
SO	HUMAN RELATIONS UNITS
CE	HUMAN SERVICES
SO	HUMAN SERVICES (SOCIAL WELFARE)
SO	HUMANISM
SO	HUMANITIES (ART, MUSIC, CULTURAL STUDIES)
CS	HUMANITIES (LITERATURE AND COMMUNICATION)
SO	HUMANITIES INSTRUCTION (ART, MUSIC, CULTURAL STUDIES)
HE	HUMANITIES INSTRUCTION (COLLEGES AND UNIVERSITIES)
CS	HUMANITIES INSTRUCTION (LITERATURE AND COMMUNICATION)
SO	HUMANIZATION
EA	HUMANIZATION (ADMINISTRATION)
EA	HYBRID AIR STRUCTURES
SP	HYGIENE (HEALTH EDUCATION)
TM	HYPOTHESIS TESTING
CG	IDENTIFICATION (PSYCHOLOGICAL)
EC	IDENTIFICATION (PSYCHOLOGICAL)
PS	IDENTIFICATION (PSYCHOLOGICAL)
UD	IDENTIFICATION (PSYCHOLOGICAL)
TM	IDENTIFICATION TESTS
CE	ILLITERACY
CE	ILLITERATE ADULTS
IR	ILLUSTRATIONS
EC	IMMIGRANTS (LABORERS)
FL	IMMIGRANTS (NONSPEAKERS OF ENGLISH)
CG	INCENTIVES
CE	INCOME
CS	INDEPENDENT READING
HE	INDEPENDENT STUDY
CE	INDEPENDENT STUDY (CORRESPONDENCE STUDY FOR ADULTS)
EC	INDEPENDENT STUDY (GIFTED)
CG	INDEPENDENT STUDY (MOTIVATIONAL TECHNIQUES)
IR	INDEXES (LOCATERS)
IR	INDEXING
EC	INDIAN AMERICANS
SO	INDIAN HISTORY
EC	INDIVIDUAL CHARACTERISTICS (HANDICAPPED AND GIFTED)
PS	INDIVIDUAL CHARACTERISTICS (PRESCHOOL CHILDREN)
CG	INDIVIDUAL CHARACTERISTICS AND PSYCHOLOGY
CS	INDIVIDUAL DEVELOPMENT (COMMUNICATIONS)
EA	INDIVIDUAL POWER
CS	INDIVIDUAL POWER (SPEECH)
CS	INDIVIDUAL READING
TM	INDIVIDUAL TESTS
IR	INDIVIDUALIZED CURRICULUM
CE	INDIVIDUALIZED CURRICULUM (CAREER EDUCATION)
HE	INDIVIDUALIZED CURRICULUM (HIGHER EDUCATION)
PS	INDIVIDUALIZED CURRICULUM (PRESCHOOL EDUCATION)
EC	INDIVIDUALIZED CURRICULUM (SPECIAL EDUCATION)
SP	INDIVIDUALIZED CURRICULUM (TEACHING)
IR	INDIVIDUALIZED INSTRUCTION
CE	INDIVIDUALIZED INSTRUCTION (CAREER EDUCATION)
UD	INDIVIDUALIZED INSTRUCTION (DISADVANTAGED)
JC	INDIVIDUALIZED INSTRUCTION (JUNIOR COLLEGES)
PS	INDIVIDUALIZED INSTRUCTION (PRESCHOOL EDUCATION)
EC	INDIVIDUALIZED INSTRUCTION (SPECIAL EDUCATION)
SO	INDIVIDUALIZED INSTRUCTION (THEORY)
CG	INDIVIDUALIZED LEARNING (MOTIVATIONAL TECHNIQUES)
EC	INDIVIDUALIZED LEARNING (MOTIVATIONAL TECHNIQUES)
SP	INDIVIDUALIZED LEARNING (MOTIVATIONAL TECHNIQUES)
IR	INDIVIDUALIZED PROGRAMS
PS	INDIVIDUALIZED PROGRAMS (PRESCHOOL EDUCATION)
EC	INDIVIDUALIZED PROGRAMS (SPECIAL EDUCATION)
SP	INDIVIDUALIZED PROGRAMS (TEACHING)
SO	INDIVIDUALIZED PROGRAMS (THEORY)
CS	INDIVIDUALIZED READING
FL	INDO EUROPEAN LANGUAGES
SE	INDUCTIVE METHODS
SO	INDUCTIVE METHODS (TEACHING)
CE	INDUSTRIAL ARTS
CE	INDUSTRIAL ARTS EDUCATION
CE	INDUSTRIAL TRAINING
CE	INDUSTRY
SE	INEQUALITIES
EC	INFANCY
PS	INFANCY
EC	INFANT BEHAVIOR
PS	INFANT BEHAVIOR
EC	INFANTS
PS	INFANTS
CE	INFORMAL ADULT EDUCATION (VOLUNTARY)
CS	INFORMAL READING INVENTORY
TM	INFORMAL READING INVENTORY

IR	INFORMATION CENTERS
IR	INFORMATION DISSEMINATION
IR	INFORMATION NEEDS
IR	INFORMATION NETWORKS
CS	INFORMATION NETWORKS (COMMUNICATION)
IR	INFORMATION PROCESSING
IR	INFORMATION RETRIEVAL
IR	INFORMATION SCIENCE
IR	INFORMATION SCIENTISTS
IR	INFORMATION SEEKING
IR	INFORMATION SERVICES
IR	INFORMATION SOURCES
IR	INFORMATION SPECIALISTS
IR	INFORMATION STORAGE
IR	INFORMATION SYSTEMS
IR	INFORMATION THEORY
IR	INFORMATION UTILIZATION
CS	INITIAL TEACHING ALPHABET
UD	INNER CITY
PS	INNER CITY (PRESCHOOL EDUCATION)
CS	INNER SPEECH (SUBVOCAL)
EC	INNER SPEECH (SUBVOCAL)
HE	INNOVATION (HIGHER EDUCATION)
JC	INNOVATION (JUNIOR COLLEGES)
EA	INNOVATIONS IN EDUCATION (APPLICATION)
SP	INNOVATIONS IN EDUCATION (RESEARCH)
SP	INNOVATIVE INSTRUCTIONAL PRACTICES
UD	INNOVATIVE INSTRUCTIONAL PRACTICES (DISADVANTAGED)
EA	INPUT OUTPUT ANALYSIS
IR	INPUT OUTPUT ANALYSIS (LIBRARY AND INFO. CTR. PROC.)
IR	INPUT OUTPUT DEVICES (LIBRARY AND INFO. CTR. PROC.)
SO	INQUIRY TRAINING
SP	INQUIRY TRAINING
CG	INSERVICE PROGRAMS
EC	INSERVICE PROGRAMS (SPECIAL EDUCATION)
SP	INSERVICE TEACHER EDUCATION
CE	INSERVICE TEACHER EDUCATION (CAREER AND VOCATIONAL)
UD	INSERVICE TEACHER EDUCATION (DISADVANTAGED)
PS	INSERVICE TEACHER EDUCATION (PRESCHOOL EDUCATION)
CS	INSERVICE TEACHER EDUCATION (READING AND COMMUNICATION)
CE	INSERVICE TRAINING IN INDUSTRY, UNIONS, ARMED FORCES
CE	INSTITUTES (TRAINING PROGRAMS)
SP	INSTITUTES (TRAINING PROGRAMS)
UD	INSTITUTES (TRAINING PROGRAMS)
EA	INSTITUTIONAL ADMINISTRATION
HE	INSTITUTIONAL ADMINISTRATION (HIGHER EDUCATION)
EA	INSTITUTIONAL FACILITIES
IR	INSTITUTIONAL LIBRARIES
HE	INSTITUTIONAL RESEARCH (HIGHER EDUCATION)
JC	INSTITUTIONAL RESEARCH (JUNIOR COLLEGES)
SP	INSTITUTIONAL ROLE
HE	INSTITUTIONAL ROLE (HIGHER EDUCATION)
EA	INSTITUTIONAL SELF STUDIES
IR	INSTRUCTIONAL AIDS
IR	INSTRUCTIONAL FILMS
CS	INSTRUCTIONAL IMPROVEMENT
JC	INSTRUCTIONAL IMPROVEMENT (JUNIOR COLLEGES)
CG	INSTRUCTIONAL INCENTIVES
SP	INSTRUCTIONAL INNOVATION
CE	INSTRUCTIONAL INNOVATION (CAREER,VOCATIONAL, ADULT ED.)
CS	INSTRUCTIONAL INNOVATION (COMMUNICATION)
HE	INSTRUCTIONAL INNOVATION (HIGHER EDUCATION)
JC	INSTRUCTIONAL INNOVATION (JUNIOR COLLEGES)
SO	INSTRUCTIONAL INNOVATION (SOCIAL STUDIES)
IR	INSTRUCTIONAL MATERIALS
CS	INSTRUCTIONAL MATERIALS (COMMUNICATION)
PS	INSTRUCTIONAL MATERIALS (PRESCHOOL EDUCATION)
SE	INSTRUCTIONAL MATERIALS (SCIENCE AND MATH. EDUCATION)
EC	INSTRUCTIONAL MATERIALS (SPECIAL EDUCATION)
IR	INSTRUCTIONAL MATERIALS CENTERS
IR	INSTRUCTIONAL MEDIA
JC	INSTRUCTIONAL MEDIA (JUNIOR COLLEGES)
CE	INSTRUCTIONAL PROGRAM DIVISIONS
SP	INSTRUCTIONAL STAFF (GENERAL)
IR	INSTRUCTIONAL SYSTEMS
IR	INSTRUCTIONAL TECHNOLOGY
IR	INSTRUCTIONAL TELEVISION
IR	INSTRUCTOR CENTERED TELEVISION
SP	INSTRUCTORS (GENERAL)
EA	INSURANCE (EDUCATIONAL FACILITIES)
SE	INTEGERS
CS	INTEGRATED ACTIVITIES
EC	INTEGRATED CLASSROOMS
CE	INTEGRATED CURRICULUM
HE	INTEGRATED CURRICULUM (HIGHER EDUCATION)
UD	INTEGRATION
UD	INTEGRATION EFFECTS
EA	INTEGRATION METHODS
UD	INTEGRATION PLANS
HE	INTEGRATION-SEGREGATION (COLLEGES AND UNIVERSITIES)
SO	INTELLECTUAL DEVELOPMENT
PS	INTELLECTUAL DEVELOPMENT (PRESCHOOL EDUCATION)
EC	INTELLECTUAL DEVELOPMENT (SPECIAL EDUCATION)
SO	INTELLECTUAL PERFORMANCE
CE	INTELLIGENCE
CG	INTELLIGENCE (DIFFERENCES, TESTS-AS RELATED TO STUDENTS)
SO	INTELLIGENCE FACTORS
EC	INTELLIGENCE FACTORS (SPECIAL EDUCATION)
TM	INTELLIGENCE QUOTIENT
TM	INTELLIGENCE TESTS
CS	INTERACTION (SPEECH)
CG	INTERACTION PROCESS ANALYSIS
SO	INTERACTION PROCESS ANALYSIS
SP	INTERACTION PROCESS ANALYSIS
EC	INTERACTION PROCESS ANALYSIS (SPECIAL EDUCATION)
CS	INTERACTION PROCESS ANALYSIS (SPEECH)
SP	INTERAGENCY COOPERATION
CS	INTERCOMMUNICATION
SO	INTERCULTURAL PROGRAMS
CS	INTERDISCIPLINARY APPROACH
SO	INTERDISCIPLINARY APPROACH
SP	INTERDISCIPLINARY APPROACH
HE	INTERDISCIPLINARY APPROACH (HIGHER EDUCATION)
TM	INTEREST SCALES
TM	INTEREST TESTS
CE	INTERESTS
SO	INTERFAITH RELATIONS
FL	INTERFERENCE (LANGUAGE LEARNING)
SO	INTERGROUP EDUCATION
UD	INTERGROUP RELATIONS
SO	INTERGROUP RELATIONS (HUMAN RELATIONS)
HE	INTERINSTITUTIONAL COOPERATION (HIGHER EDUCATION)
JC	INTERINSTITUTIONAL COOPERATION (JC'S AND OTHER INSTS.)
EA	INTERIOR DESIGN
IR	INTERLIBRARY LOANS
EA	INTERMEDIATE ADMINISTRATIVE UNITS
IR	INTERMODE DIFFERENCES
SO	INTERNATIONAL EDUCATION
FL	INTERNATIONAL EDUCATION (TEACHING LANGUAGES ABROAD)
FL	INTERNATIONAL EXCHANGES
SO	INTERNATIONAL EXCHANGES
FL	INTERNATIONAL STUDIES (INVOLVING FOREIGN LANGUAGES)
SP	INTERNSHIP PROGRAMS
CE	INTERPERSONAL COMPETENCE
CS	INTERPERSONAL COMPETENCE
CE	INTERPERSONAL RELATIONSHIP
CG	INTERPERSONAL RELATIONSHIP
UD	INTERPERSONAL RELATIONSHIP
CS	INTERPERSONAL RELATIONSHIP (COMMUNICATION)
SO	INTERPERSONAL RELATIONSHIP (HUMAN RELATIONS)
CS	INTERPRETIVE READING
PS	INTERVENTION
EC	INTERVENTION (EMOTIONALLY DISTURBED)
CG	INTERVIEWING
CG	INTERVIEWS (COUNSELING, EMPLOYMENT)
CS	INTRODUCTORY COMPOSITION
TM	INVENTORIES
FL	ITALIAN
TM	ITEM ANALYSIS
TM	ITEM BANKS/POOLS
TM	ITEM SAMPLING
FL	JAPANESE
CE	JOB ANALYSIS
CE	JOB PLACEMENT
CG	JOB PLACEMENT (COUNSELING)
EC	JOB PLACEMENT (HANDICAPPED)
CE	JOB SKILLS
CE	JOB TRAINING
CS	JOURNALISM
IR	JUNIOR COLLEGE LIBRARIES
JC	JUNIOR COLLEGE STUDENTS
JC	JUNIOR COLLEGES
CG	JUNIOR HIGH SCHOOL STUDENTS
CG	JUVENILE DELINQUENCY
PS	KINDERGARTEN
PS	KINDERGARTEN CHILDREN
IR	KINESCOPE RECORDINGS
CS	KINESTHETIC METHODS
CS	KINESTHETIC PERCEPTION
EC	KINESTHETIC PERCEPTION
CE	KNOWLEDGE LEVEL
CE	LABOR EDUCATION
CE	LABOR FORCE
CE	LABOR SUPPLY
CE	LABOR UNIONS
SE	LABORATORIES
SE	LABORATORY EQUIPMENT
SE	LABORATORY EXPERIMENTS
SE	LABORATORY MANUALS
SE	LABORATORY PROCEDURES
SE	LABORATORY SAFETY
SP	LABORATORY SCHOOLS
SE	LABORATORY TECHNIQUES
CE	LABORATORY TRAINING
SE	LABORATORY TRAINING
SP	LABORATORY TRAINING (TEACHERS)
HE	LAND GRANT UNIVERSITIES
CS	LANGUAGE
CS	LANGUAGE ABILITY
FL	LANGUAGE ABILITY (ACHIEVEMENT IN FOREIGN LANGUAGES)
EC	LANGUAGE ABILITY (SPECIAL EDUCATION)
CS	LANGUAGE ARTS
FL	LANGUAGE CLASSIFICATION
CS	LANGUAGE DEVELOPMENT
FL	LANGUAGE DEVELOPMENT
PS	LANGUAGE DEVELOPMENT (PRESCHOOL EDUCATION)
EC	LANGUAGE DEVELOPMENT (SPECIAL EDUCATION)
FL	LANGUAGE ENROLLMENT
CS	LANGUAGE EXPERIENCE APPROACH
CS	LANGUAGE HANDICAPS

EC	LANGUAGE IMPAIRED CHILDREN
CS	LANGUAGE INSTRUCTION
FL	LANGUAGE INSTRUCTION (FOREIGN LANGUAGES)
FL	LANGUAGE LABORATORIES
IR	LANGUAGE LABORATORIES
IR	LANGUAGE LABORATORY EQUIPMENT
FL	LANGUAGE PATTERNS
CS	LANGUAGE PATTERNS (ENGLISH)
FL	LANGUAGE PROGRAMS
CS	LANGUAGE PROGRAMS (ENGLISH)
CS	LANGUAGE RESEARCH
FL	LANGUAGE SCIENCES
CS	LANGUAGE SKILLS (ENGLISH)
CS	LANGUAGE STANDARDIZATION
FL	LANGUAGE STYLES
FL	LANGUAGE TESTS
TM	LANGUAGE TESTS
CS	LANGUAGE TESTS (ENGLISH)
FL	LANGUAGE TYPOLOGY
FL	LANGUAGE UNIVERSALS
FL	LANGUAGE USAGE
CS	LANGUAGE USAGE (ENGLISH)
IR	LASERS
CS	LATERAL DOMINANCE
EC	LATERAL DOMINANCE (LEARNING DISABILITIES)
FL	LATIN
CE	LAW ENFORCEMENT
SO	LAW ENFORCEMENT
EA	LAW ENFORCEMENT (ADMINISTRATION)
SO	LAW INSTRUCTION
IR	LAW LIBRARIES
HE	LAW SCHOOLS
EA	LAWS (EDUCATION)
HE	LAWYERS
CS	LEADERSHIP (SPEECH)
EA	LEADERSHIP RESPONSIBILITY
SO	LEADERSHIP RESPONSIBILITY
CE	LEADERSHIP STYLE
CE	LEADERSHIP TRAINING
HE	LEADERSHIP TRAINING
EA	LEADERSHIP TRAINING (ADMINISTRATION)
SO	LEADERSHIP TRAINING (COMMUNITY)
CG	LEARNING
SO	LEARNING
IR	LEARNING CHARACTERISTICS
CS	LEARNING DIFFICULTIES
EC	LEARNING DIFFICULTIES
UD	LEARNING DIFFICULTIES (DISADVANTAGED)
CS	LEARNING DISABILITIES
EC	LEARNING DISABILITIES
SE	LEARNING LABORATORY
EC	LEARNING LABORATORY (SPECIAL EDUCATION)
CE	LEARNING MOTIVATION
EC	LEARNING MOTIVATION
SO	LEARNING MOTIVATION
EC	LEARNING PROBLEMS (CHILDREN)
CS	LEARNING PROCESSES
PS	LEARNING PROCESSES
SO	LEARNING PROCESSES
SP	LEARNING PROCESSES
EC	LEARNING PROCESSES (SPECIAL EDUCATION)
CS	LEARNING THEORIES
SO	LEARNING THEORIES
SP	LEARNING THEORIES
UD	LEARNING THEORIES
EC	LEARNING THEORIES (SPECIAL EDUCATION)
CG	LEARNING THEORY/PSYCHOLOGY (BASIC; FOR INDIVIDUALS;
EA	LEASING SCHOOL LANDS
CE	LECTURE
HE	LEGAL ISSUES (COLLEGES AND UNIVERSITIES)
CG	LEGAL PROBLEMS
EA	LEGAL PROBLEMS
SO	LEGAL PROBLEMS
IR	LEGISLATIVE REFERENCE LIBRARIES
CG	LEISURE TIME
SO	LEISURE TIME
SP	LESSON OBSERVATION CRITERIA
CS	LETTERS (ALPHABET)
IR	LEXICOGRAPHY
CS	LEXICOLOGY
IR	LEXICOLOGY
IR	LEXICOLOGY (DOCUMENT PROCESSING)
FL	LEXICOLOGY (RESEARCH: FOREIGN LANGUAGE DICTIONARIES)
HE	LIBERAL ARTS MAJORS
IR	LIBRARIANS
IR	LIBRARIANSHIP
IR	LIBRARIES
IR	LIBRARY ACQUISITIONS
IR	LIBRARY AIDS
IR	LIBRARY AND INFORMATION PROCESSING
IR	LIBRARY AND INFORMATION SCIENCE PERSONNEL
IR	LIBRARY AND INFORMATION SYSTEMS
IR	LIBRARY ASSOCIATIONS
IR	LIBRARY AUTOMATION
IR	LIBRARY CIRCULATION
IR	LIBRARY COLLECTIONS
IR	LIBRARY COOPERATION
IR	LIBRARY EDUCATION
IR	LIBRARY EQUIPMENT
IR	LIBRARY EXPENDITURES
IR	LIBRARY EXTENSION
IR	LIBRARY FACILITIES
IR	LIBRARY GUIDES
IR	LIBRARY INSTRUCTION
IR	LIBRARY MATERIALS
IR	LIBRARY MATERIALS SELECTION
IR	LIBRARY NETWORKS
IR	LIBRARY ORGANIZATIONS
IR	LIBRARY PLANNING
IR	LIBRARY PROGRAMS
IR	LIBRARY REFERENCE SERVICES
IR	LIBRARY RESEARCH
IR	LIBRARY SCHOOLS
IR	LIBRARY SCIENCE
IR	LIBRARY SERVICES
IR	LIBRARY SKILLS
IR	LIBRARY SPECIALISTS
IR	LIBRARY STANDARDS
IR	LIBRARY SURVEYS
IR	LIBRARY TECHNICAL PROCESSES
IR	LIBRARY TECHNICIANS
IR	LIBRARY TRAINING
CG	LIFE HISTORIES (PERSONAL DATA)
IR	LIGHTING
IR	LINEAR PROGRAMING
CS	LINGUISTIC COMPETENCE
FL	LINGUISTIC COMPETENCE
CS	LINGUISTIC PERFORMANCE
CS	LINGUISTIC THEORY
FL	LINGUISTIC THEORY
FL	LINGUISTICS
IR	LINGUISTICS (ELECTRONIC DATA PROCESSING)
CS	LISTENING
EC	LISTENING
CS	LISTENING COMPREHENSION
EC	LISTENING COMPREHENSION
FL	LISTENING COMPREHENSION
CS	LISTENING SKILLS
EC	LISTENING SKILLS
TM	LISTENING TESTS
CS	LITERACY
CS	LITERACY EDUCATION
CE	LITERACY EDUCATION FOR ADULTS
CS	LITERARY ANALYSIS
CS	LITERARY COMPOSITIONS
CS	LITERARY CONVENTIONS
CS	LITERARY CRITICISM
CS	LITERARY GENRES
CS	LITERARY HISTORY
CS	LITERARY STYLES
CS	LITERATURE
CS	LITERATURE APPRECIATION
FL	LITERATURE APPRECIATION (FOREIGN LANGUAGE READING)
IR	LITERATURE GROWTH
CS	LITERATURE GUIDES
CS	LITERATURE PROGRAMS
CS	LITERATURE REVIEWS
CE	LITERATURE REVIEWS (ADULT EDUCATION)
IR	LITERATURE SEARCHES
CG	LOANS TO STUDENTS
SE	LOGIC
CS	LOGIC (SPEECH COMMUNICATION)
EC	LONGITUDINAL STUDIES
PS	LONGITUDINAL STUDIES
CE	LOW ABILITY STUDENTS
UD	LOW ACHIEVEMENT FACTORS
EC	LOW ACHIEVERS
IR	MACHINE FORMATS
IR	MACHINE TRANSLATION
IR	MAGNETIC TAPE CASSETTE RECORDERS
IR	MAGNETIC TAPE CASSETTES
IR	MAGNETIC TAPES
EA	MAINTENANCE (EDUCATIONAL FACILITIES)
CE	MALES
IR	MAN MACHINE SYSTEMS (DOCUMENT STORAGE AND RETRIEVAL)
EA	MANAGEMENT
CE	MANAGEMENT DEVELOPMENT
EA	MANAGEMENT DEVELOPMENT
HE	MANAGEMENT DEVELOPMENT
IR	MANAGEMENT GAMES
EA	MANAGEMENT SYSTEMS
CS	MANAGEMENT SYSTEMS (COMMUNICATION)
IR	MANAGEMENT SYSTEMS (TECHNOLOGY)
SE	MANIPULATIVE MATERIALS
CE	MANPOWER DEVELOPMENT
UD	MANPOWER DEVELOPMENT
CE	MANPOWER ECONOMICS
CE	MANPOWER NEEDS
IR	MANPOWER NEEDS (LIBRARIANS AND INFORMATION SCIENTISTS)
CE	MANPOWER UTILIZATION
IR	MAPS
SE	MARINE BIOLOGY
SE	MARINE SCIENCE
CE	MARITAL STATUS
IR	MASS MEDIA
CS	MASS MEDIA (COMMUNICATION)
JC	MASTER PLANS (JUNIOR COLLEGES)
IR	MASTER TAPES (AUDIO)
SP	MASTER TEACHERS
HE	MASTERS THESES

IR	MATERIAL DEVELOPMENT
SE	MATHEMATICAL APPLICATIONS
SE	MATHEMATICAL CONCEPTS
SE	MATHEMATICAL ENRICHMENT
SE	MATHEMATICAL EXPERIENCE
SE	MATHEMATICAL LOGIC
SE	MATHEMATICAL MODELS
TM	MATHEMATICAL MODELS
SE	MATHEMATICAL VOCABULARY
SE	MATHEMATICIANS
SE	MATHEMATICS
SE	MATHEMATICS CURRICULUM
SE	MATHEMATICS EDUCATION/INSTRUCTION
CE	MATHEMATICS INSTRUCTION (ADULT EDUCATION)
SE	MATHEMATICS MATERIALS
SE	MATHEMATICS TEACHER EDUCATION
SE	MATHEMATICS TEACHERS
TM	MATURITY TESTS
TM	MEASUREMENT
SE	MEASUREMENT (SCIENCE)
TM	MEASUREMENT GOALS
TM	MEASUREMENT INSTRUMENTS
SP	MEASUREMENT PROCEDURES/TECHNIQUES
TM	MEASUREMENT PROCEDURES/TECHNIQUES
IR	MECHANICAL TEACHING AIDS
IR	MEDIA (NON-PRINT)
SE	MEDIA APPLICATIONS TO SCIENCE
IR	MEDIA RESEARCH
IR	MEDIA SELECTION
IR	MEDIA SPECIALISTS
IR	MEDIA TECHNOLOGY
HE	MEDICAL EDUCATION
IR	MEDICAL LIBRARIES
IR	MEDICAL RECORD LIBRARIANS
SP	MEDICAL SERVICES (HEALTH EDUCATION)
CS	MEMORY
EC	MEMORY (HANDICAPPED AND GIFTED)
PS	MEMORY (YOUNG CHILDREN)
CG	MENTAL DEVELOPMENT
EC	MENTAL DEVELOPMENT
PS	MENTAL DEVELOPMENT
SO	MENTAL DEVELOPMENT
CE	MENTAL HEALTH
CG	MENTAL HEALTH
EC	MENTAL HEALTH
TM	MENTAL TESTS
EC	MENTALLY HANDICAPPED
EC	MENTALLY RETARDED CHILDREN
EA	MERCHANDISE INFORMATION
EA	MERIT PAY
CE	METAL WORKING OCCUPATIONS
RC	MEXICAN AMERICAN HISTORY
SO	MEXICAN AMERICAN HISTORY
RC	MEXICAN AMERICANS
CE	MEXICAN AMERICANS (ADULTS)
FL	MEXICAN AMERICANS (BILINGUAL EDUCATION PROGRAMS)
IR	MICROFICHE
IR	MICROFILM
IR	MICROFORM READER PRINTERS
IR	MICROFORM READERS
IR	MICROFORM TECHNOLOGY
IR	MICROFORMS
IR	MICROPHONES
IR	MICROREPRODUCTION
IR	MICROTEACHING
SP	MICROTEACHING
CE	MIDDLE AGED
EA	MIDDLE SCHOOLS
RC	MIGRANT CHILD EDUCATION
PS	MIGRANT CHILD EDUCATION (PRESCHOOL)
RC	MIGRANT CHILDREN
PS	MIGRANT CHILDREN (PRESCHOOL)
RC	MIGRANT EDUCATION
CE	MIGRANT EDUCATION (ADULT)
RC	MIGRANT WORKERS
RC	MIGRANTS
CE	MILITARY PERSONNEL
CG	MILITARY PERSONNEL (COUNSELING)
CE	MILITARY TRAINING (TRAINING WHILE IN MILITARY SERVICE)
RC	MINORITIES (RURAL AREAS)
UD	MINORITY GROUP CHILDREN
UD	MINORITY GROUP TEACHERS
CE	MINORITY GROUPS
FL	MINORITY GROUPS
RC	MINORITY GROUPS
SO	MINORITY GROUPS
UD	MINORITY GROUPS
EA	MOBILE CLASSROOMS
SE	MOBILE LABORATORIES
IR	MODELS
TM	MODELS (MEASUREMENT STRATEGIES)
SP	MODELS (TEACHING)
SO	MODELS (THEORY)
FL	MODERN LANGUAGES
EA	MODULAR BUILDING DESIGN
EA	MODULAR SCHEDULING
FL	MORPHOLOGY (LANGUAGES)
CE	MOTHERS
EC	MOTHERS
PS	MOTHERS
CG	MOTIVATION
UD	MOTIVATION (DISADVANTAGED)
SO	MOTIVATION (ENVIRONMENT)
EC	MOTIVATION (SPECIAL EDUCATION)
SO	MOTIVATION TECHNIQUES
CS	MOTIVATION TECHNIQUES (COMMUNICATION)
CG	MOTIVATION TECHNIQUES (FOR STUDENT LEARNING)
EC	MOTIVATION TECHNIQUES (FOR STUDENT LEARNING)
SP	MOTIVATION TECHNIQUES (TEACHING)
IR	MULTICHANNEL PROGRAMING
TM	MULTIDIMENSIONAL SCALING
IR	MULTIGRADED CLASSES
IR	MULTIMEDIA INSTRUCTION
CS	MULTIMEDIA INSTRUCTION (COMMUNICATION)
EC	MULTIMEDIA INSTRUCTION (SPECIAL EDUCATION)
TM	MULTIPLE CHOICE TESTS
SE	MULTIPLICATION
EC	MULTIPLY HANDICAPPED
EC	MULTISENSORY LEARNING
SO	MUSIC
SO	MUSIC EDUCATION
CG	NARCOTICS ADDICTION
CS	NARRATION (COMMUNICATION)
TM	NATIONAL ASSESSMENT
TM	NATIONAL COMPETENCY TESTS
FL	NATIONAL DEFENSE EDUCATION ACT INSTITUTES
SP	NATIONAL DEFENSE EDUCATION ACT INSTITUTES
TM	NATIONAL INTELLIGENCE NORM
IR	NATIONAL LIBRARIES
TM	NATIONAL NORMS
RC	NATIVE AMERICANS
SP	NATURE CENTERS
EA	NEGOTIATION (COLLECTIVE)
EA	NEGOTIATION AGREEMENTS
EA	NEGOTIATION IMPASSES
UD	NEGRO ACHIEVEMENT
UD	NEGRO ATTITUDES
PS	NEGRO CHILDREN (PRESCHOOL)
HE	NEGRO COLLEGES
CS	NEGRO DIALECTS
CS	NEGRO LITERATURE
UD	NEGRO STEREOTYPES
CG	NEGRO STUDENTS
UD	NEGRO STUDENTS
JC	NEGRO STUDENTS (JUNIOR COLLEGES)
CG	NEGRO YOUTH
RC	NEGRO YOUTH (RURAL)
CE	NEGROES
EA	NEIGHBORHOOD SCHOOL POLICY
EA	NEIGHBORHOOD SCHOOLS
SE	NETWORKS
EC	NEUROLOGICALLY HANDICAPPED CHILDREN
CE	NEW CAREERS
SE	NEW MATH
CS	NEWSPAPERS
SO	NON-WESTERN CIVILIZATION
IR	NONBOOK MATERIALS
CG	NONCOLLEGE PREPARATORY STUDENTS
CE	NONCREDIT COURSES
HE	NONCREDIT COURSES
IR	NONGRADED CLASSES
EA	NONGRADED SCHOOL (CONTINUOUS PROGRESS PLAN)
SP	NONGRADED SCHOOL (CONTINUOUS PROGRESS PLAN)
IR	NONGRADED SYSTEM
RC	NONMETROPOLITAN AREAS
TM	NONPARAMETRIC STATISTICS
IR	NONPRINT RESOURCES
CG	NONPROFESSIONAL PERSONNEL
PS	NONPROFESSIONAL PERSONNEL (DAY CARE)
IR	NONPROFESSIONAL PERSONNEL (LIB./INFO. SCI. TECHNICIANS)
EA	NONPUBLIC EDUCATION
EA	NONPUBLIC SCHOOL AID
RC	NONRESERVATION AMERICAN INDIANS
CS	NONSTANDARD DIALECTS
UD	NONSTANDARD DIALECTS
FL	NONSTANDARD DIALECTS (INNER CITY DIALECTS, INCL. ENGLISH)
FL	NONVERBAL COMMUNICATION
SP	NONVERBAL COMMUNICATION
EC	NONVERBAL COMMUNICATION (HANDICAPPED)
TM	NONVERBAL TESTS
TM	NORM REFERENCED TESTS
SE	NUCLEAR PHYSICS
SE	NUMBER CONCEPTS
SE	NUMBER SYSTEMS
SE	NUMBERS
PS	NURSERY SCHOOLS
EC	NURSERY SCHOOLS (HANDICAPPED)
CE	NURSES
CE	NURSES AIDES
CE	NURSING
UD	NUTRITION
TM	OBJECTIVE TESTS
SO	OBJECTIVES
CG	OBJECTIVES
CG	OCCUPATIONAL ASPIRATION
CE	OCCUPATIONAL CHOICE
CE	OCCUPATIONAL CLUSTERS
CE	OCCUPATIONAL GUIDANCE
CG	OCCUPATIONAL GUIDANCE
CE	OCCUPATIONAL HOME ECONOMICS

CE	OCCUPATIONAL INFORMATION
CG	OCCUPATIONAL INFORMATION
CE	OCCUPATIONAL MOBILITY
CE	OCCUPATIONAL PSYCHOLOGY
CG	OCCUPATIONAL SETTINGS, ANALYSIS OF
CE	OCCUPATIONAL SOCIOLOGY
CE	OCCUPATIONAL SURVEYS
TM	OCCUPATIONAL TESTS
CE	OCCUPATIONS
SE	OCEANOGRAPHY
SE	OCEANOLOGY
CE	OFF THE JOB TRAINING
RC	OFF-RESERVATION AMERICAN INDIANS
RC	OFF-RESERVATION BOARDING SCHOOLS
CE	OFFICE MACHINES
CE	OFFICE OCCUPATIONS EDUCATION
CE	OFFICE PRACTICE
CE	OFFICER PERSONNEL
CE	OLDER ADULTS
CG	OLDER ADULTS
CG	OMBUDSMEN
HE	OMBUDSMEN (HIGHER EDUCATION)
IR	ON LINE SYSTEMS
CE	ON THE JOB TRAINING
IR	OPAQUE PROJECTORS
IR	OPEN CIRCUIT TELEVISION
SP	OPEN EDUCATION
CS	OPEN ENROLLMENT
EA	OPEN PLAN SCHOOLS
SP	OPEN PLAN SCHOOLS
PS	OPEN PLAN SCHOOLS (PRESCHOOL EDUCATION)
CG	OPERANT CONDITIONING
PS	OPERANT CONDITIONING (PRESCHOOL EDUCATION)
EC	OPERANT CONDITIONING (SPECIAL EDUCATION)
EA	OPERATING EXPENSES
CS	OPERATIONS RESEARCH (COMMUNICATION)
IR	OPTICAL SCANNERS
IR	OPTIONAL BRANCHING
CS	ORAL COMMUNICATION
EC	ORAL COMMUNICATION (SPECIAL EDUCATION)
SP	ORAL COMMUNICATION (TEACHING)
CS	ORAL ENGLISH
CS	ORAL EXPRESSION
EC	ORAL EXPRESSION (SPECIAL EDUCATION)
CS	ORAL READING
EA	ORGANIZATIONAL CHANGE
EA	ORGANIZATIONAL CLIMATE
SO	ORGANIZATIONAL CLIMATE
SP	ORGANIZATIONAL CLIMATE
CS	ORGANIZATIONAL CLIMATE (COMMUNICATION)
EA	ORGANIZATIONS (EDUCATIONAL)
SP	ORIENTATION
CG	ORIENTATION OF STUDENTS
CE	ORNAMENTAL HORTICULTURE
EC	ORTHOPEDICALLY HANDICAPPED CHILDREN
RC	OUTDOOR EDUCATION
SP	OUTDOOR EDUCATION
EA	OUTDOOR LIGHTING
CG	OVERACHIEVERS
EC	OVERACHIEVERS (GIFTED)
HE	OVERCROWDING (COLLEGES AND UNIVERSITIES)
IR	OVERHEAD PROJECTORS
SO	OVERPOPULATION
IR	OVERT RESPONSES
CS	PACING
SE	PALEONTOLOGY
CS	PAPERBACK BOOKS
FL	PARALINGUISTICS
CE	PARAMEDICAL OCCUPATIONS
SP	PARAPROFESSIONAL SCHOOL PERSONNEL
PS	PARAPROFESSIONAL SCHOOL PERSONNEL (PRESCHOOL)
CE	PARENT ATTITUDES
SO	PARENT ATTITUDES
UD	PARENT ATTITUDES (DISADVANTAGED)
EC	PARENT ATTITUDES (HANDICAPPED AND GIFTED)
PS	PARENT ATTITUDES (PRESCHOOL)
CG	PARENT CHILD RELATIONSHIP
EC	PARENT CHILD RELATIONSHIP
PS	PARENT CHILD RELATIONSHIP
CG	PARENT COUNSELING
EC	PARENT COUNSELING
CE	PARENT EDUCATION
PS	PARENT EDUCATION
CG	PARENT INFLUENCE
EC	PARENT PARTICIPATION
PS	PARENT PARTICIPATION
CG	PARENT SCHOOL RELATIONSHIP
PS	PARENT SCHOOL RELATIONSHIP
EC	PARENT TEACHER COOPERATION
PS	PARENT TEACHER COOPERATION
SP	PARENT TEACHER COOPERATION
EC	PARENTAL BEHAVIOR
PS	PARENTAL BEHAVIOR
CE	PARENTS
EC	PARENTS (OF HANDICAPPED AND GIFTED)
PS	PARENTS (OF PRESCHOOL)
EA	PARKING FACILITIES
EA	PAROCHIAL SCHOOL AID
CE	PART TIME JOBS
HE	PART TIME STUDENTS (COLLEGES AND UNIVERSITIES)
CE	PART TIME STUDY
CE	PARTICIPANT CHARACTERISTICS
CE	PARTICIPANT INVOLVEMENT
CE	PARTICIPANT SATISFACTION
HE	PASS FAIL GRADING
FL	PATTERN DRILLS (LANGUAGE)
CS	PATTERN RECOGNITION
SO	PEACE
CG	PEER GROUPS
PS	PEER GROUPS (PRESCHOOL)
SP	PEER TEACHING
PS	PEER TEACHING (PRESCHOOL)
SE	PERCENTAGE
CG	PERCEPTION
CS	PERCEPTION
SO	PERCEPTION (PSYCHOLOGY)
EC	PERCEPTION (SPECIAL EDUCATION)
TM	PERCEPTION TESTS
CS	PERCEPTUAL DEVELOPMENT
EC	PERCEPTUAL DEVELOPMENT
PS	PERCEPTUAL DEVELOPMENT (PRESCHOOL)
SO	PERCEPTUAL DEVELOPMENT (PSYCHOLOGY)
CS	PERCEPTUAL MOTOR COORDINATION
EC	PERCEPTUAL MOTOR COORDINATION
PS	PERCEPTUAL MOTOR COORDINATION
SO	PERCEPTUAL MOTOR COORDINATION (PSYCHOLOGY)
EC	PERCEPTUALLY HANDICAPPED CHILDREN
SP	PERFORMANCE BASED TEACHER EDUCATION
EA	PERFORMANCE CONTRACTS
TM	PERFORMANCE CONTRACTS
EA	PERFORMANCE CRITERIA
SP	PERFORMANCE CRITERIA
CG	PERFORMANCE FACTORS
EC	PERFORMANCE FACTORS (HANDICAPPED AND GIFTED)
EA	PERFORMANCE SPECIFICATIONS
SP	PERFORMANCE SPECIFICATIONS
TM	PERFORMANCE TESTS
IR	PERMUTED INDEXES
CE	PERSISTENCE
CG	PERSISTENCE
HE	PERSISTENCE (COLLEGE STUDENTS)
JC	PERSISTENCE (JUNIOR COLLEGE STUDENTS)
CS	PERSONAL RELATIONSHIP (COMMUNICATION)
CE	PERSONALITY
CG	PERSONALITY
EC	PERSONALITY
SO	PERSONALITY
TM	PERSONALITY ASSESSMENT
SO	PERSONALITY DEVELOPMENT
EC	PERSONALITY DEVELOPMENT (HANDICAPPED AND GIFTED)
PS	PERSONALITY DEVELOPMENT (PRESCHOOL)
TM	PERSONALITY TESTS
HE	PERSONALITY TESTS (COLLEGE STUDENTS)
CG	PERSONNEL DATA
EA	PERSONNEL EVALUATION
CS	PERSONNEL INTEGRATION
EA	PERSONNEL MANAGEMENT
EA	PERSONNEL POLICY
CG	PERSONNEL SELECTION (ADMINISTRATORS,COUNSELORS,TEACHERS)
HE	PERSONNEL SELECTION (HIGHER EDUCATION)
CG	PERSONNEL WORKERS
SO	PHILOSOPHY
PS	PHILOSOPHY (EDUCATIONAL)
SP	PHILOSOPHY (EDUCATIONAL)
CS	PHONEME GRAPHEME CORRESPONDENCE
CS	PHONEMES
CS	PHONEMIC ALPHABETS
FL	PHONEMIC ALPHABETS
FL	PHONEMICS
FL	PHONETICS
CS	PHONICS
IR	PHONOGRAPH RECORDS
IR	PHONOTAPE RECORDINGS
IR	PHOTOGRAPHIC EQUIPMENT
IR	PHOTOGRAPHS/PHOTOGRAPH
UD	PHYSICAL DEVELOPMENT (DISADVANTAGED)
EC	PHYSICAL DEVELOPMENT (HANDICAPPED)
CG	PHYSICAL DEVELOPMENT (LEARNING ABILITY)
PS	PHYSICAL DEVELOPMENT (PRESCHOOL)
SP	PHYSICAL EDUCATION
EC	PHYSICAL EDUCATION (HANDICAPPED)
PS	PHYSICAL EDUCATION (PRIMARY GRADES)
SP	PHYSICAL EDUCATION (PRIMARY GRADES)
SP	PHYSICAL FITNESS
SE	PHYSICAL SCIENCES
EC	PHYSICALLY HANDICAPPED CHILDREN
CE	PHYSICIANS
SE	PHYSICS
SE	PHYSICS CURRICULUM
SE	PHYSICS EXPERIMENTS
SE	PHYSICS INSTRUCTION
SE	PHYSICS TEACHERS
SE	PHYSIOLOGY
CS	PHYSIOLOGY OF READING
CS	PICTORIAL STIMULI
EC	PICTORIAL STIMULI
PS	PICTORIAL STIMULI
CG	PLACEMENT
SE	PLANE GEOMETRY
EA	PLANNING (EDUCATIONAL)

EA	PLANNING (FACILITIES)
SE	PLANT GROWTH
SE	PLANT IDENTIFICATION
SE	PLANT PATHOLOGY
SE	PLANT SCIENCE
EA	PNEUMATIC FORMS
CS	POETRY
CE	POLICE
CE	POLICE COMMUNITY RELATIONS
CE	POLICE SEMINARS
EA	POLICY FORMATION
SO	POLITICAL AFFILIATION
EA	POLITICAL INFLUENCES (EDUCATION)
SO	POLITICAL INFLUENCES (SOCIAL STUDIES)
SO	POLITICAL ISSUES (SOCIAL STUDIES)
EA	POLITICAL POWER (EDUCATION)
SO	POLITICAL POWER (SOCIAL STUDIES)
SO	POLITICAL SCIENCE
SO	POLITICAL SOCIALIZATION
SO	POLLUTION
SO	POPULATION EDUCATION (SOCIAL STUDIES)
SE	POPULATION GROWTH
SP	POST DOCTORAL EDUCATION (TEACHERS)
HE	POST DOCTORAL PROGRAMS
HE	POST GRADUATE EDUCATION
CG	POST SECONDARY EDUCATION
JC	POST SECONDARY EDUCATION
CE	POST TESTING
TM	POST TESTING
SE	POTENTIOMETERS (INSTRUMENTS)
RC	POVERTY (RURAL AREAS)
CE	POWER MECHANICS
EA	POWER STRUCTURE (EDUCATION)
SO	POWER STRUCTURE (SOCIAL STUDIES)
SE	PRACTICAL MATHEMATICS
CE	PRACTICAL NURSES
CG	PRACTICUMS
SP	PRACTICUMS
CE	PREDICTION
CG	PREDICTION
TM	PREDICTION
TM	PREDICTIVE ABILITY (TESTING)
TM	PREDICTIVE MEASUREMENT
TM	PREDICTIVE VALIDITY
TM	PREDICTOR VARIABLES
EA	PREFABRICATION (EDUCATIONAL FACILITIES)
CG	PREGNANCY (TEENAGERS, UNWED MOTHERS, MARRIED STUDENTS)
EA	PREGNANT STUDENTS
EC	PRENATAL FACTORS
PS	PRENATAL FACTORS
CG	PRESCHOOL CHILDREN
PS	PRESCHOOL CHILDREN
EC	PRESCHOOL CHILDREN (HANDICAPPED AND GIFTED)
PS	PRESCHOOL CURRICULUM
EC	PRESCHOOL CURRICULUM (SPECIAL EDUCATION)
PS	PRESCHOOL EDUCATION
UD	PRESCHOOL EDUCATION (DISADVANTAGED)
EC	PRESCHOOL EDUCATION (SPECIAL)
PS	PRESCHOOL LEARNING
EC	PRESCHOOL LEARNING (HANDICAPPED AND GIFTED)
PS	PRESCHOOL PROGRAMS
EC	PRESCHOOL PROGRAMS (SPECIAL EDUCATION)
PS	PRESCHOOL TEACHERS
TM	PRESCHOOL TESTS
TM	PRESCRIPTIVE TESTS
EC	PRESERVICE EDUCATION (SPECIAL)
SP	PRESERVICE EDUCATION (TEACHERS)
SP	PRESERVICE TEACHER EDUCATION
HE	PRESIDENTS (INSTITUTIONS OF HIGHER EDUCATION)
CE	PRETESTING
TM	PRETESTING
HE	PRETESTING (COLLEGE STUDENTS)
TM	PRETESTS
PS	PRIMARY GRADES (1-3)
EC	PRIMARY GRADES (1-3) (SPECIAL EDUCATION)
SE	PRIME NUMBERS
EA	PRINCIPALS
IR	PRINT FORMATS
CE	PRISON EDUCATION PROGRAMS
HE	PRIVATE COLLEGES
EA	PRIVATE FINANCIAL SUPPORT
HE	PRIVATE FINANCIAL SUPPORT (HIGHER EDUCATION)
SE	PROBABILITY THEORY
SE	PROBLEM SETS
TM	PROBLEM SETS
SE	PROBLEM SOLVING
SO	PROBLEM SOLVING
CG	PROBLEM SOLVING (COUNSELING)
EC	PROBLEM SOLVING (SPECIAL EDUCATION)
IR	PRODUCTION TECHNIQUES
HE	PROFESSIONAL ASSOCIATIONS
CE	PROFESSIONAL CONTINUING EDUCATION
HE	PROFESSIONAL CONTINUING EDUCATION
HE	PROFESSIONAL EDUCATION (MEDICAL, LAW, ETC.)
HE	PROFESSIONAL OCCUPATIONS
CE	PROFESSIONAL PERSONNEL
CG	PROFESSIONAL PERSONNEL
EA	PROFESSIONAL PERSONNEL
TM	PROGNOSTIC TESTS
EA	PROGRAM ADMINISTRATION
HE	PROGRAM ADMINISTRATION (HIGHER EDUCATION)
EA	PROGRAM BUDGETING
JC	PROGRAM BUDGETING (JUNIOR COLLEGES)
EA	PROGRAM COSTS
HE	PROGRAM COSTS (HIGHER EDUCATION)
SP	PROGRAM DESCRIPTIONS
EC	PROGRAM DESCRIPTIONS (SPECIAL EDUCATION)
EA	PROGRAM DESIGN
EA	PROGRAM DEVELOPMENT
SP	PROGRAM DEVELOPMENT
CG	PROGRAM DEVELOPMENT (GUIDANCE, CAREER COUNSELING)
HE	PROGRAM DEVELOPMENT (HIGHER EDUCATION)
JC	PROGRAM DEVELOPMENT (JUNIOR COLLEGES)
PS	PROGRAM DEVELOPMENT (PRESCHOOL EDUCATION)
EC	PROGRAM DEVELOPMENT (SPECIAL EDUCATION)
EA	PROGRAM EFFECTIVENESS
SP	PROGRAM EFFECTIVENESS
TM	PROGRAM EFFECTIVENESS (MEASUREMENT OR EVALUATION)
PS	PROGRAM EFFECTIVENESS (PRESCHOOL EDUCATION)
TM	PROGRAM EVALUATION
EA	PROGRAM GUIDES
EA	PROGRAM IMPROVEMENT
EA	PROGRAM PLANNING
SP	PROGRAM PLANNING
HE	PROGRAM PLANNING (HIGHER EDUCATION)
JC	PROGRAM PLANNING (JUNIOR COLLEGES)
EC	PROGRAM PLANNING (SPECIAL EDUCATION)
IR	PROGRAMED INSTRUCTION
FL	PROGRAMED INSTRUCTION AND LANGUAGES
IR	PROGRAMED MATERIALS
IR	PROGRAMED TEXTS
IR	PROGRAMED TUTORING
IR	PROGRAMED UNITS
IR	PROGRAMERS
SE	PROGRAMING
IR	PROGRAMING (BROADCAST)
IR	PROGRAMING LANGUAGES
IR	PROGRAMING TECHNIQUES
EA	PROGRAMS (EDUCATIONAL)
PS	PROJECT HEAD START
IR	PROJECT INTREX
IR	PROJECTION EQUIPMENT
EA	PROJECTIONS (STATISTICAL STUDIES)
TM	PROJECTIVE TESTS
IR	PROJECTORS
CE	PROMOTION (OCCUPATIONAL)
IR	PROMPTING
EA	PROPERTY (EDUCATIONAL FACILITIES)
EA	PROPERTY TAXES
CE	PROPRIETARY SCHOOLS
CS	PROSE
SP	PROTOCOL MATERIALS
CS	PSYCHOLINGUISTICS
FL	PSYCHOLINGUISTICS
EC	PSYCHOLINGUISTICS (SPECIAL EDUCATION)
CG	PSYCHOLOGICAL CHARACTERISTICS
SO	PSYCHOLOGICAL CHARACTERISTICS
EC	PSYCHOLOGICAL CHARACTERISTICS (HANDICAPPED AND GIFTED)
TM	PSYCHOLOGICAL EVALUATION
CE	PSYCHOLOGICAL NEEDS
TM	PSYCHOLOGICAL TESTING
CG	PSYCHOLOGICAL TESTING (COUNSELING-RELATED)
HE	PSYCHOLOGICAL TESTING (HIGHER EDUCATION)
EC	PSYCHOLOGICAL TESTING (SPECIAL EDUCATION)
TM	PSYCHOLOGICAL TESTS
SO	PSYCHOLOGY (AS A SOCIAL SCIENCE)
CG	PSYCHOLOGY OF LEARNING
SO	PSYCHOLOGY OF LEARNING
EC	PSYCHOLOGY OF LEARNING (HANDICAPPED AND GIFTED)
CS	PSYCHOLOGY OF READING
TM	PSYCHOMETRICS
TM	PSYCHOMETRISTS
EC	PSYCHOMOTOR DISORDERS
SO	PUBLIC AFFAIRS EDUCATION
CE	PUBLIC AFFAIRS EDUCATION (ADULTS)
IR	PUBLIC LIBRARIES
EA	PUBLIC OFFICIALS
CE	PUBLIC OPINION
CE	PUBLIC RELATIONS
EA	PUBLIC RELATIONS
CS	PUBLIC SPEAKING
IR	PUBLIC TELEVISION
IR	PUBLICATIONS AND REFERENCE MATERIALS
IR	PUBLISHING INDUSTRY
UD	PUERTO RICANS
CE	PUERTO RICANS (VOCATIONAL EDUCATION)
CG	PUPIL PERSONNEL SERVICES (USE FOR K-12)
CS	PUPPETRY (INTERPRETATION OF CHILDRENS LITERATURE)
EA	PURCHASING
IR	PUZZLES
TM	PUZZLES
EA	PYRAMID ORGANIZATION
TM	Q SORT
EA	QUARTER SYSTEM
TM	QUESTIONNAIRES
SO	RACE RELATIONS
UD	RACE RELATIONS
HE	RACIAL ATTITUDES
PS	RACIAL ATTITUDES
UD	RACIAL ATTITUDES

UD	RACIAL BALANCE
CE	RACIAL DIFFERENCES
PS	RACIAL DIFFERENCES
RC	RACIAL DIFFERENCES
UD	RACIAL DIFFERENCES
UD	RACIAL DISCRIMINATION
CG	RACIAL FACTORS
UD	RACIAL FACTORS
UD	RACIALLY BALANCED SCHOOLS
SE	RADAR
SE	RADIATION
SE	RADIATION BIOLOGY
SE	RADIATION EFFECTS
IR	RADIO
IR	RADIO TECHNOLOGY
SE	RADIOISOTOPES
CS	RAPID READING
CS	RAPPORT (COMMUNICATION)
HE	RATING SCALES
TM	RATING SCALES
SE	RATIONAL NUMBERS
SE	RATIOS (MATHEMATICS)
TM	RAW SCORES
IR	REACTION TIME
CS	READABILITY
CS	READINESS
EC	READINESS (HANDICAPPED AND GIFTED)
PS	READINESS (PRESCHOOL)
CS	READING
CS	READING (ENGLISH INSTRUCTION)
FL	READING (FOREIGN LANGUAGES)
CS	READING ABILITY
EC	READING ABILITY (HANDICAPPED AND GIFTED)
PS	READING ABILITY (PRESCHOOL)
CS	READING ACHIEVEMENT
PS	READING ACHIEVEMENT (PRESCHOOL)
CS	READING BEHAVIOR
CS	READING CENTERS
CS	READING CLINICS
CS	READING COMPREHENSION
FL	READING COMPREHENSION (FOREIGN LANGUAGES)
CS	READING CONSULTANTS
CS	READING DEVELOPMENT
CS	READING DIAGNOSIS
CS	READING DIFFICULTY
CS	READING FAILURE
EC	READING FAILURE (HANDICAPPED AND GIFTED)
CS	READING GAMES
IR	READING GAMES
CS	READING HABITS
CS	READING IMPROVEMENT
CS	READING INSTRUCTION
CE	READING INSTRUCTION (ADULTS)
UD	READING INSTRUCTION (DISADVANTAGED)
CS	READING INTERESTS
CS	READING LEVEL
CS	READING MATERIAL SELECTION
CS	READING MATERIALS
CS	READING PROCESSES
CS	READING PROGRAMS
CS	READING READINESS
EC	READING READINESS (HANDICAPPED AND GIFTED)
CS	READING READINESS TESTS
TM	READING READINESS TESTS
CS	READING RESEARCH
CS	READING SKILLS
CS	READING SPEED
CS	READING TEACHERS
CS	READING TESTS
TM	READING TESTS
IR	REALIA
IR	RECALL (INFORMATION RETRIEVAL)
CG	RECALL (PSYCHOLOGICAL)
CS	RECEPTIVE LANGUAGE (COMMUNICATION)
SE	RECIPROCALS (MATHEMATICS)
IR	RECORDERS (TAPE)
IR	RECORDERS (VTR)
RC	RECREATION
SP	RECREATION (HEALTH, PHYSICAL EDUCATION AND RECREATION)
CS	RECREATIONAL READING
CG	RECRUITMENT
SP	RECRUITMENT (TEACHER)
IR	REFERENCE MATERIALS
CG	REFERRAL
CS	REGIONAL DIALECTS
FL	REGIONAL DIALECTS (INNER CITY DIALECTS,INCL. ENGLISH)
IR	REGIONAL LIBRARIES
EA	REGIONAL PLANNING
EA	REGIONAL SCHOOLS
CG	REHABILITATION COUNSELING
CE	REHABILITATION TRAINING
SO	REINFORCEMENT
CG	REINFORCEMENT (COUNSELING)
UD	REINFORCEMENT (DISADVANTAGED)
EC	REINFORCEMENT (HANDICAPPED AND GIFTED)
CE	REINFORCEMENT (REHABILITATION)
SP	REINFORCEMENT (TEACHING)
SE	RELATIONSHIP
SO	RELEVANCE (EDUCATION)
SP	RELEVANCE (EDUCATION)
UD	RELEVANCE (EDUCATION) (DISADVANTAGED)
HE	RELEVANCE (EDUCATION) (HIGHER EDUCATION)
IR	RELEVANCE (INFORMATION RETRIEVAL)
TM	RELIABILITY
SO	RELIGIOUS EDUCATION
EA	RELOCATABLE FACILITIES
SE	REMEDIAL ARITHMETIC
SE	REMEDIAL MATHEMATICS
HE	REMEDIAL PROGRAMS (HIGHER EDUCATION)
JC	REMEDIAL PROGRAMS (JUNIOR COLLEGES)
PS	REMEDIAL PROGRAMS (PRIMARY GRADES)
EC	REMEDIAL PROGRAMS (SPECIAL EDUCATION)
CS	REMEDIAL READING
EC	REMEDIAL READING (HANDICAPPED)
CS	REMEDIAL READING CLINICS
CS	REMEDIAL READING PROGRAMS
CS	REMEDIAL READING SERVICES
EA	RENOVATION (EDUCATIONAL FACILITIES)
IR	REPETITIVE FILM SHOWINGS
IR	REPROGRAPHY
SO	RESEARCH
EA	RESEARCH AND DEVELOPMENT CENTERS
SP	RESEARCH AND DEVELOPMENT CENTERS
TM	RESEARCH DESIGN
IR	RESEARCH LIBRARIES
SO	RESEARCH METHODOLOGY
TM	RESEARCH METHODOLOGY (TESTS)
CS	RESEARCH ON READING
SO	RESEARCH REVIEW (PUBLICATIONS)
IR	RESEARCH UTILIZATION (INFO. DISS. AND UTILIZATION)
RC	RESERVATIONS (INDIAN)
CG	RESIDENT ASSISTANTS
HE	RESIDENT STUDENTS
HE	RESIDENTIAL COLLEGES
CE	RESIDENTIAL PROGRAMS
EC	RESIDENTIAL PROGRAMS (SPECIAL EDUCATION)
EA	RESOURCE ALLOCATIONS
IR	RESOURCE CENTERS
IR	RESPONSE MODE
TM	RESPONSE STYLE (TESTS)
EC	RETARDED CHILDREN
CS	RETARDED READERS
CE	RETIREMENT (GENERAL)
SP	RETIREMENT (TEACHER)
CS	RHETORIC
CG	RISK
CE	ROLE CONFLICT
CE	ROLE PERCEPTION
SO	ROLE PERCEPTION
SP	ROLE PERCEPTION
CS	ROLE PERCEPTION (COMMUNICATION)
CE	ROLE PLAYING
CG	ROLE THEORY
SO	ROLE THEORY
FL	ROMANCE LANGUAGES
CG	RUNAWAYS
CE	RURAL AREAS
RC	RURAL AREAS
RC	RURAL DEVELOPMENT
RC	RURAL EDUCATION
CE	RURAL EXTENSION
RC	RURAL POPULATION
RC	RURAL SCHOOLS
RC	RURAL URBAN DIFFERENCES
CG	RURAL YOUTH
RC	RURAL YOUTH
FL	RUSSIAN
HE	SABBATICAL LEAVES
CE	SAFETY EDUCATION
CG	SAFETY EDUCATION
EA	SALARIES (TEACHER)
SP	SALARIES (TEACHER)
TM	SAMPLING
TM	SCALES
EA	SCHEDULE MODULES
EA	SCHEDULING
HE	SCHEDULING (HIGHER EDUCATION)
CG	SCHOLARSHIP LOANS
HE	SCHOLARSHIPS
EA	SCHOOL ACCOUNTING
EA	SCHOOL ADMINISTRATION
EA	SCHOOL ATTENDANCE LAWS
EA	SCHOOL BUDGET ELECTIONS
EA	SCHOOL BUILDINGS
EA	SCHOOL BUSES
SP	SCHOOL CADRES
EA	SCHOOL CALENDARS
CG	SCHOOL COMMUNITY RELATIONSHIP
PS	SCHOOL COMMUNITY RELATIONSHIP
SP	SCHOOL COMMUNITY RELATIONSHIP
UD	SCHOOL COMMUNITY RELATIONSHIP
JC	SCHOOL COMMUNITY RELATIONSHIP (JUNIOR COLLEGES)
EA	SCHOOL CONSTRUCTION
EA	SCHOOL DESIGN
EA	SCHOOL DISTRICT AUTONOMY
EA	SCHOOL DISTRICT SPENDING
CG	SCHOOL DROPOUTS
EA	SCHOOL EQUIPMENT
EA	SCHOOL EXPANSION
EA	SCHOOL FUNDS

CG	SCHOOL HEALTH SERVICES
EA	SCHOOL IMPROVEMENT
CE	SCHOOL INDUSTRY RELATIONSHIP
UD	SCHOOL INTEGRATION
EA	SCHOOL LAW
IR	SCHOOL LIBRARIES
EA	SCHOOL MAINTENANCE
EA	SCHOOL ORGANIZATION
CG	SCHOOL PATROLS
SP	SCHOOL PERSONNEL/FACULTY
EA	SCHOOL PLANNING
EA	SCHOOL PLANT
EA	SCHOOL POLICY
EA	SCHOOL PROPERTY
CG	SCHOOL PSYCHOLOGISTS
TM	SCHOOL READINESS TESTS
EA	SCHOOL REDISTRICTING
CG	SCHOOL RESPONSIBILITY
EA	SCHOOL SCHEDULES/SCHEDULING
UD	SCHOOL SEGREGATION
EA	SCHOOL SIZE
EA	SCHOOL SPACE
EA	SCHOOL STATISTICS
EA	SCHOOL SUPERINTENDENTS
EA	SCHOOL SUPERVISION
EA	SCHOOL TAXES
EA	SCHOOL VANDALISM
SP	SCHOOLS OF EDUCATION
SE	SCIENCE ACTIVITIES
SE	SCIENCE CAREERS
SE	SCIENCE CLUBS
SE	SCIENCE CONSULTANTS
SE	SCIENCE COURSE IMPROVEMENT PROJECT
SE	SCIENCE COURSES
SE	SCIENCE CURRICULUM
SE	SCIENCE DEPARTMENTS
SE	SCIENCE EDUCATION
SE	SCIENCE EDUCATION HISTORY
SE	SCIENCE EQUIPMENT
SE	SCIENCE EXPERIMENTS
SE	SCIENCE FACILITIES
SE	SCIENCE FAIRS
SE	SCIENCE HISTORY
SE	SCIENCE INSTITUTES
SE	SCIENCE INSTRUCTION
SE	SCIENCE LABORATORIES
SE	SCIENCE MATERIALS
SE	SCIENCE PROGRAMS
SE	SCIENCE PROJECTS
SE	SCIENCE SUPERVISION
SE	SCIENCE TEACHER EDUCATION
SE	SCIENCE TEACHERS
SE	SCIENCE TEACHING CENTERS
SE	SCIENCE TESTS
TM	SCIENCE TESTS
SE	SCIENCE UNITS
SE	SCIENTIFIC ATTITUDES
SE	SCIENTIFIC CONCEPTS
SE	SCIENTIFIC ENTERPRISE
SE	SCIENTIFIC LITERACY
SE	SCIENTIFIC MANPOWER
SE	SCIENTIFIC METHODOLOGY
SE	SCIENTIFIC PERSONNEL
SE	SCIENTIFIC PRINCIPLES
SE	SCIENTIFIC RESEARCH
SE	SCIENTISTS
CE	SCIENTISTS (PARAPROFESSIONALS)
TM	SCORES/SCORING
TM	SCORING FORMULAS
TM	SCORING SYSTEMS
TM	SCREENING TESTS
IR	SCREENS (DISPLAYS)
IR	SEARCH STRATEGIES (INFORMATION RETRIEVAL)
RC	SEASONAL LABORERS
CS	SECOND LANGUAGE LEARNING
FL	SECOND LANGUAGE LEARNING
CS	SECOND LANGUAGES
SE	SECONDARY SCHOOL MATHEMATICS
SE	SECONDARY SCHOOL SCIENCE
SP	SECONDARY SCHOOL TEACHERS
CE	SECRETARIES
UD	SEGREGATION
HE	SEGREGATION-INTEGRATION (COLLEGES AND UNIVERSITIES)
IR	SELECTIVE DISSEMINATION OF INFORMATION
CG	SELF ACTUALIZATION
SO	SELF ACTUALIZATION
EC	SELF ACTUALIZATION (HANDICAPPED AND GIFTED)
CG	SELF CONCEPT
SO	SELF CONCEPT
UD	SELF CONCEPT (DISADVANTAGED)
EC	SELF CONCEPT (HANDICAPPED AND GIFTED)
PS	SELF CONCEPT (PRESCHOOL)
TM	SELF CONCEPT TESTS
EA	SELF-STUDIES (INSTITUTIONAL)
TM	SEMANTIC DIFFERENTIAL
CS	SEMANTICS
FL	SEMANTICS
CE	SEMINARS
HE	SEMINARS
FL	SEMIOTICS
IR	SEMIOTICS
FL	SEMITIC LANGUAGES
CE	SENSITIVITY TRAINING
CG	SENSITIVITY TRAINING
SO	SENSITIVITY TRAINING
SP	SENSITIVITY TRAINING
HE	SENSITIVITY TRAINING (HIGHER EDUCATION)
EC	SENSITIVITY TRAINING (SPECIAL EDUCATION)
CS	SENSORY INTEGRATION (LANGUAGE)
CS	SEQUENTIAL READING PROGRAMS
CE	SERVICE EDUCATION
CE	SERVICE OCCUPATIONS
SE	SET THEORY
CG	SEX DIFFERENCES
PS	SEX DIFFERENCES (PRESCHOOL)
SP	SEX EDUCATION (HEALTH EDUCATION)
CG	SEXUALITY
IR	SHARED SERVICES (ELECTRONIC DATA PROCESSING)
CG	SHELTERED WORKSHOPS
CE	SHORT COURSES
HE	SHORT COURSES
EC	SIBLINGS
PS	SIBLINGS
CS	SIGHT METHOD
CS	SIGHT VOCABULARY
EC	SIGHT VOCABULARY
IR	SIGNS
CS	SILENT READING
IR	SIMULATED ENVIRONMENT
CG	SIMULATION
IR	SIMULATION
SP	SIMULATION
IR	SIMULATORS
IR	SINGLE CONCEPT FILMS
FL	SINO TIBETAN LANGUAGES
EA	SITES (EDUCATIONAL FACILITIES)
TM	SITUATIONAL TESTS
IR	SKILL ANALYSIS
SO	SKILL DEVELOPMENT
PS	SKILL DEVELOPMENT (PRESCHOOL)
CE	SKILLED OCCUPATIONS
FL	SLAVIC LANGUAGES
IR	SLIDES
RC	SMALL SCHOOLS
CG	SMOKING PROBLEMS (HEALTH EDUCATION)
SO	SOCIAL ACTION
SO	SOCIAL ATTITUDES
HE	SOCIAL ATTITUDES (HIGHER EDUCATION)
SO	SOCIAL BEHAVIOR
PS	SOCIAL BEHAVIOR (PRESCHOOL)
CE	SOCIAL CHANGE
CG	SOCIAL CHANGE
SO	SOCIAL CHANGE
SO	SOCIAL DEVELOPMENT
PS	SOCIAL DEVELOPMENT (PRESCHOOL)
CS	SOCIAL DIALECTS
CG	SOCIAL INFLUENCES
SO	SOCIAL INFLUENCES
CS	SOCIAL INFLUENCES (SPEECH)
SO	SOCIAL PLANNING
CE	SOCIAL PROBLEMS
SO	SOCIAL PROBLEMS
SO	SOCIAL PSYCHOLOGY
SO	SOCIAL RELATIONS
PS	SOCIAL RELATIONS (PRESCHOOL)
SO	SOCIAL SCIENCES
SO	SOCIAL STRATIFICATION
SO	SOCIAL STUDIES
SO	SOCIAL STUDIES TEACHERS
SO	SOCIAL STUDIES UNITS
SO	SOCIAL SYSTEMS
CG	SOCIAL VALUES
SO	SOCIAL VALUES
HE	SOCIAL VALUES (HIGHER EDUCATION)
SO	SOCIAL WELFARE
CE	SOCIAL WORKERS
CG	SOCIAL WORKERS
SO	SOCIALIZATION
PS	SOCIALIZATION (PRESCHOOL)
CG	SOCIALLY DEVIANT BEHAVIOR
SO	SOCIALLY DEVIANT BEHAVIOR
EC	SOCIALLY DEVIANT BEHAVIOR (HANDICAPPED AND GIFTED)
UD	SOCIALLY DISADVANTAGED
PS	SOCIALLY DISADVANTAGED (PRESCHOOL)
RC	SOCIALLY DISADVANTAGED (RURAL AREAS)
RC	SOCIOECONOMIC BACKGROUND
UD	SOCIOECONOMIC BACKGROUND
SO	SOCIOECONOMIC INFLUENCES
UD	SOCIOECONOMIC INFLUENCES
HE	SOCIOECONOMIC INFLUENCES (HIGHER EDUCATION)
PS	SOCIOECONOMIC INFLUENCES (PRESCHOOL)
CE	SOCIOECONOMIC PROGRAMS
CE	SOCIOECONOMIC STATUS
CG	SOCIOECONOMIC STATUS
SO	SOCIOECONOMIC STATUS
PS	SOCIOECONOMIC STATUS (PRESCHOOL)
CS	SOCIOLINGUISTICS
FL	SOCIOLINGUISTICS
SO	SOCIOLOGY
CS	SOCIOLOGY OF READING

CG	SOCIOMETRIC TECHNIQUES
TM	SOCIOMETRIC TECHNIQUES
SE	SOIL SCIENCE
SE	SOLID GEOMETRY
IR	SOUND EFFECTS
IR	SOUND FILMS
IR	SOUND TRACKS
UD	SOUTHERN ATTITUDES
EA	SPACE NEEDS (EDUCATIONAL FACILITIES)
SE	SPACE SCIENCE
EA	SPACE UTILIZATION
FL	SPANISH
RC	SPANISH AMERICANS
RC	SPANISH SPEAKING
FL	SPANISH SPEAKING (BILINGUAL EDUCATION OF MINORITIES)
CS	SPEAKING
FL	SPEAKING
CE	SPECIAL DEGREE PROGRAMS
HE	SPECIAL DEGREE PROGRAMS
EC	SPECIAL EDUCATION
EC	SPECIAL EDUCATION TEACHERS
IR	SPECIAL EFFECTS
EC	SPECIAL HEALTH PROBLEMS
IR	SPECIAL LIBRARIES
CS	SPEECH
CS	SPEECH CURRICULUM
CS	SPEECH EDUCATION
EC	SPEECH HANDICAPPED
EC	SPEECH IMPAIRED CHILDREN
CS	SPEECH INSTRUCTION
CS	SPEECH SKILLS
TM	SPEECH TESTS
CS	SPEED READING
CS	SPELLING
CG	STAFF ROLE
SP	STAFF ROLE
SP	STAFF UTILIZATION
TM	STANDARD ERROR OF MEASUREMENT
CS	STANDARD SPOKEN USAGE
TM	STANDARDIZED TESTS
HE	STANDARDIZED TESTS (HIGHER EDUCATION)
HE	STANDARDS (HIGHER EDUCATION)
PS	STANDARDS (PRESCHOOL)
CE	STATE AGENCIES
EA	STATE AID
HE	STATE AID (HIGHER EDUCATION)
PS	STATE AID (PRESCHOOL)
EA	STATE BOARDS OF EDUCATION
HE	STATE BOARDS OF EDUCATION
SP	STATE BOARDS OF EDUCATION
HE	STATE COLLEGES
EA	STATE DEPARTMENTS OF EDUCATION
SP	STATE DEPARTMENTS OF EDUCATION
EA	STATE FEDERAL AID
HE	STATE FEDERAL AID (HIGHER EDUCATION)
PS	STATE FEDERAL AID (PRESCHOOL)
EA	STATE FEDERAL SUPPORT
CE	STATE GOVERNMENT
EA	STATE GOVERNMENT
EA	STATE LAWS
SO	STATE LAWS
PS	STATE LAWS (PRESCHOOL EDUCATION)
EA	STATE LEGISLATION
SO	STATE LEGISLATION
JC	STATE LEGISLATION (JUNIOR COLLEGES)
IR	STATE LIBRARIES
HE	STATE PROGRAMS (HIGHER EDUCATION)
PS	STATE PROGRAMS (PRESCHOOL)
EA	STATE SCHOOL DISTRICT RELATIONSHIP
EC	STATE SCHOOLS (FOR THE HANDICAPPED)
HE	STATE SCHOOLS (HIGHER EDUCATION)
CE	STATE STANDARDS
EA	STATE STANDARDS
SP	STATE STANDARDS
PS	STATE STANDARDS (PRESCHOOL EDUCATION)
EA	STATE SUPERVISORS
TM	STATE SURVEYS (STATEWIDE ASSESMENT)
HE	STATE UNIVERSITIES
EA	STATEWIDE PLANNING
JC	STATEWIDE PLANNING (JUNIOR COLLEGES)
TM	STATISTICAL ANALYSIS
TM	STATISTICAL BIAS
EA	STATISTICAL STUDIES (GENERAL)
HE	STATISTICAL STUDIES (HIGHER EDUCATION)
TM	STATISTICS
SE	STATISTICS (MATHEMATICS)
PS	STIMULATION (PRIMARY GRADES)
CS	STORY READING
CS	STORY TELLING
EA	STRIKES (TEACHER)
CS	STRUCTURAL ANALYSIS
CS	STRUCTURAL GRAMMAR
FL	STRUCTURAL GRAMMAR
FL	STRUCTURAL LINGUISTICS
HE	STUDENT ABILITY
CG	STUDENT ALIENATION
SO	STUDENT ALIENATION
HE	STUDENT ALIENATION (COLLEGE AND UNIVERSITY)
SO	STUDENT ATTITUDES
SP	STUDENT ATTITUDES
HE	STUDENT ATTITUDES (COLLEGE AND UNIVERSITY)
UD	STUDENT ATTITUDES (DISADVANTAGED)
JC	STUDENT ATTITUDES (JUNIOR COLLEGE)
TM	STUDENT ATTITUDES (MEASUREMENT OR ASSESSMENT)
PS	STUDENT ATTITUDES (PRESCHOOL)
SO	STUDENT BEHAVIOR
HE	STUDENT BEHAVIOR (COLLEGE AND UNIVERSITY)
PS	STUDENT BEHAVIOR (PRESCHOOL)
EA	STUDENT CENTERED CURRICULUM
SP	STUDENT CENTERED CURRICULUM
CG	STUDENT CHARACTERISTICS
SO	STUDENT CHARACTERISTICS
HE	STUDENT CHARACTERISTICS (COLLEGE AND UNIVERSITY)
JC	STUDENT CHARACTERISTICS (JUNIOR COLLEGE)
CG	STUDENT COLLEGE RELATIONSHIP
HE	STUDENT COLLEGE RELATIONSHIP
JC	STUDENT COLLEGE RELATIONSHIP (JUNIOR COLLEGES)
EA	STUDENT COSTS
IR	STUDENT DEVELOPED MATERIALS
CG	STUDENT EMPLOYMENT
CG	STUDENT ENROLLMENT
EA	STUDENT ENROLLMENT
HE	STUDENT EVALUATION (HIGHER EDUCATION)
TM	STUDENT EVALUATION (THEORY, PROCESS, MEASURES)
FL	STUDENT EXCHANGE PROGRAMS
CG	STUDENT GOVERNMENT
CG	STUDENT LOANS
CE	STUDENT NEEDS
JC	STUDENT NEEDS (JUNIOR COLLEGE STUDENTS)
JC	STUDENT OPINION (JUNIOR COLLEGE STUDENTS)
HE	STUDENT ORGANIZATIONS
CG	STUDENT ORIENTATION
EA	STUDENT PARTICIPATION
SO	STUDENT PARTICIPATION
HE	STUDENT PARTICIPATION (COLLEGE AND UNIVERSITY)
JC	STUDENT PARTICIPATION (NON-COURSE-RELATED ACTIVITIES)
CE	STUDENT PERSONNEL SERVICES
CG	STUDENT PERSONNEL SERVICES
CG	STUDENT PERSONNEL SERVICES (HIGHER EDUCATION)
JC	STUDENT PERSONNEL SERVICES (JUNIOR COLLEGES)
EA	STUDENT RECORDS
EA	STUDENT RESPONSIBILITY
SO	STUDENT ROLE
HE	STUDENT ROLE (HIGHER EDUCATION)
SE	STUDENT SCIENCE INTERESTS
CG	STUDENT SUBCULTURES
SO	STUDENT SUBCULTURES
CE	STUDENT TEACHER RELATIONSHIP
CG	STUDENT TEACHER RELATIONSHIP
SO	STUDENT TEACHER RELATIONSHIP
SP	STUDENT TEACHER RELATIONSHIP
UD	STUDENT TEACHER RELATIONSHIP (DISADVANTAGED)
JC	STUDENT TEACHER RELATIONSHIP (JUNIOR COLLEGES)
PS	STUDENT TEACHER RELATIONSHIP (PRESCHOOL)
SP	STUDENT TEACHERS/TEACHING
TM	STUDENT TESTING
EA	STUDENT TRANSPORTATION
SP	STUDENT VOLUNTEERS
HE	STUDENTS (COLLEGE AND UNIVERSITY)
FL	STUDY ABROAD
CS	STUDY SKILLS
CE	SUBCULTURE
IR	SUBJECT INDEX TERMS
CE	SUBPROFESSIONALS
JC	SUBPROFESSIONALS
SE	SUBTRACTION
CG	SUCCESS FACTORS
TM	SUMMATIVE EVALUATION
HE	SUMMER INSTITUTES
UD	SUMMER PROGRAMS
PS	SUMMER PROGRAMS (PRIMARY GRADES)
SE	SUMMER SCIENCE PROGRAMS
EA	SUPERINTENDENT ROLE
EA	SUPERINTENDENTS
CG	SUPERVISION
EA	SUPERVISORS
CE	SUPERVISORS (OCCUPATION)
EA	SUPERVISORY ACTIVITIES
EA	SUPERVISORY METHODS
SP	SUPERVISORY METHODS
EA	SUPERVISORY TRAINING
SP	SUPERVISORY TRAINING
CE	SUPERVISORY TRAINING (OCCUPATION)
CS	SUPPLEMENTARY READING MATERIALS
EA	SUPREME COURT LITIGATION
FL	SURFACE STRUCTURE
CE	SURVEYS
FL	SWAHILI
FL	SYLLABLES
SE	SYMBOLS (MATHEMATICS)
SE	SYMMETRY
CS	SYNTAX
FL	SYNTAX
IR	SYSTEM VOCABULARIES
IR	SYSTEMS ANALYSIS
SO	SYSTEMS ANALYSIS
IR	SYSTEMS APPROACH
SO	SYSTEMS APPROACH
CS	SYSTEMS APPROACH (COMMUNICATION)
JC	SYSTEMS APPROACH (TO ADMIN. OR INSTRUCTION IN JC'S)

IR	SYSTEMS CONCEPTS
IR	SYSTEMS DEVELOPMENT
CS	SYSTEMS DEVELOPMENT (COMMUNICATION)
TM	TACTUAL VISUAL TESTS
TM	TAILORED TESTING
TM	TALENT IDENTIFICATION
IR	TAPE RECORDERS/RECORDINGS
IR	TASK ANALYSIS
EA	TAX ALLOCATION
SE	TAXONOMY
IR	TAXONOMY (INFORMATION PROCESSING AND/OR CLASSIFICATION)
SP	TEACHER
EA	TEACHER ADMINISTRATOR RELATIONSHIP
SP	TEACHER ADMINISTRATOR RELATIONSHIP
HE	TEACHER ADMINISTRATOR RELATIONSHIP (HIGHER EDUCATION)
SP	TEACHER AIDES
PS	TEACHER AIDES (PRESCHOOL)
EC	TEACHER AIDES (SPECIAL EDUCATION)
EA	TEACHER ASSOCIATIONS
SP	TEACHER ASSOCIATIONS
SP	TEACHER ATTITUDES
UD	TEACHER ATTITUDES (DISADVANTAGED)
JC	TEACHER ATTITUDES (JUNIOR COLLEGE TEACHERS)
PS	TEACHER ATTITUDES (PRESCHOOL)
SP	TEACHER CERTIFICATION
CG	TEACHER CHARACTERISTICS
SP	TEACHER CHARACTERISTICS
HE	TEACHER CHARACTERISTICS (HIGHER EDUCATION)
EA	TEACHER CONTRACTS
IR	TEACHER DEVELOPED MATERIALS
EA	TEACHER DISCIPLINE
EA	TEACHER DISMISSAL
SP	TEACHER EDUCATION
SP	TEACHER EDUCATION CURRICULUM
SP	TEACHER EDUCATOR EDUCATION
EA	TEACHER EMPLOYMENT
SP	TEACHER EMPLOYMENT
EA	TEACHER EVALUATION
SP	TEACHER EVALUATION
TM	TEACHER EVALUATION
EA	TEACHER MILITANCY
SP	TEACHER MILITANCY
EA	TEACHER PROMOTION
SP	TEACHER PROMOTION
EA	TEACHER RECRUITMENT
SP	TEACHER RECRUITMENT/SELECTION
SP	TEACHER RETIREMENT
CG	TEACHER ROLE
SP	TEACHER ROLE
PS	TEACHER ROLE (PRESCHOOL)
EA	TEACHER SALARIES
SP	TEACHER SALARIES
SP	TEACHER SELECTION
EA	TEACHER STRIKES
SP	TEACHER STRIKES
EA	TEACHER SUPERVISION
SP	TEACHER SUPERVISION
SP	TEACHER SUPPLY AND DEMAND
EA	TEACHER UNIONS
SP	TEACHERS (GENERAL)
SO	TEACHING
SP	TEACHING
SP	TEACHING AIDES
SP	TEACHING ASSISTANTS
HE	TEACHING ASSISTANTS (HIGHER EDUCATION)
HE	TEACHING LOAD (HIGHER EDUCATION)
IR	TEACHING MACHINES
CE	TEACHING METHODS
SP	TEACHING METHODS
CS	TEACHING METHODS (ENGLISH,READING,AND SPEECH)
FL	TEACHING METHODS (FOREIGN LANGUAGES)
JC	TEACHING METHODS (JUNIOR COLLEGES)
PS	TEACHING METHODS (PRESCHOOL)
SO	TEACHING METHODS (THEORY)
SO	TEACHING MODELS
SP	TEACHING MODELS
CS	TEACHING OF ENGLISH
CS	TEACHING READING
SP	TEACHING SKILLS
SP	TEACHING TECHNIQUES
EA	TEAM ADMINISTRATION
EA	TEAM TEACHING
SP	TEAM TEACHING
PS	TEAM TEACHING (PRESCHOOL)
CE	TECHNICAL EDUCATION
SE	TECHNICAL MATHEMATICS
CE	TECHNICAL OCCUPATIONS
CE	TECHNOLOGICAL ADVANCEMENT
IR	TELECOMMUNICATION
IR	TELECOURSES
IR	TELEPHONE COMMUNICATION SYSTEMS
CE	TELEPHONE INSTRUCTION
EC	TELEPHONE INSTRUCTION (SPECIAL EDUCATION)
IR	TELEVISED INSTRUCTION
IR	TELEVISION
IR	TELEVISION COMMERCIALS
IR	TELEVISION CURRICULUM
IR	TELEVISION LIGHTING
IR	TELEVISION RESEARCH
IR	TELEVISION SURVEYS
IR	TELEVISION TEACHERS
IR	TELEVISION VIEWING
HE	TENURE (HIGHER EDUCATION)
IR	TENURE (LIBRARIANS)
SP	TENURE (TEACHERS)
CG	TERMINAL STUDENTS
IR	TERMINOLOGY (LIBRARY AND INFORMATION SCIENCE)
TM	TEST BIAS
TM	TEST CONSTRUCTION
HE	TEST INTERPRETATION
TM	TEST INTERPRETATION
TM	TEST RELIABILITY
TM	TEST RESULTS
UD	TEST RESULTS (DISADVANTAGED)
PS	TEST RESULTS (PRESCHOOL)
TM	TEST REVIEWS
TM	TEST SCORING MACHINES
TM	TEST SELECTION
HE	TEST VALIDITY
TM	TEST VALIDITY
PS	TEST VALIDITY (PRESCHOOL)
TM	TESTING
CE	TESTING (ADULTS)
HE	TESTING (HIGHER EDUCATION)
TM	TESTING PROBLEMS
TM	TESTING PROGRAMS
TM	TESTS
PS	TESTS (PRESCHOOL)
TM	TESTS OF SIGNIFICANCE
CE	TEXTBOOK EVALUATION
CS	TEXTBOOKS
CS	THEATER ARTS
CG	THERAPEUTIC ENVIRONMENT
EC	THERAPEUTIC ENVIRONMENT (SPECIAL EDUCATION)
EA	THERMAL ENVIRONMENT
IR	THESAURI
IR	THREE DIMENSIONAL AIDS
IR	TIME SHARING
TM	TIMED TESTS
SP	TITLE XI NDEA INSTITUTES
EA	TOILET FACILITIES
SE	TOPOLOGY
IR	TOYS
CE	TRADE AND INDUSTRIAL EDUCATION
CS	TRADITIONAL GRAMMAR
FL	TRADITIONAL GRAMMAR
CE	TRAINERS
SP	TRAINING LABORATORIES
HE	TRAINING PROGRAMS (COLLEGES AND UNIVERSITIES)
CE	TRANSFER OF TRAINING
SO	TRANSFER OF TRAINING
JC	TRANSFER PROGRAMS (JUNIOR COLLEGES)
CG	TRANSFER STUDENTS
HE	TRANSFER STUDENTS
JC	TRANSFER STUDENTS
FL	TRANSFORMATION GENERATIVE GRAMMAR
FL	TRANSFORMATIONS (LANGUAGE)
SE	TRANSFORMATIONS (MATHEMATICS)
IR	TRANSPARENCIES
SE	TRIGONOMETRY
EA	TRIMESTER SCHEDULE
CG	TRUANCY
EA	TRUANCY
TM	TRUE SCORES
HE	TRUSTEES (COLLEGE AND UNIVERSITY)
IR	TRUSTEES (LIBRARY)
HE	TRUSTS (FINANCIAL)
HE	TUITION GRANTS
CG	TUTORIAL PROGRAMS
SP	TUTORIAL PROGRAMS
CS	TUTORIAL PROGRAMS (ENGLISH AND READING)
HE	TUTORIAL PROGRAMS (HIGHER EDUCATION)
SP	TUTORING
HE	TUTORING (HIGHER EDUCATION)
PS	TUTORING (PRIMARY GRADES)
EC	TUTORING (SPECIAL EDUCATION)
CE	TYPEWRITING
FL	UNCOMMONLY TAUGHT LANGUAGES
CG	UNDERACHIEVERS
EC	UNDERACHIEVERS (HANDICAPPED)
PS	UNDERACHIEVERS (PRESCHOOL)
HE	UNDERGRADUATE STUDY
CE	UNEMPLOYMENT
IR	UNGRADED PROGRAMS
IR	UNGRADED SCHOOLS
IR	UNION CATALOGS
EA	UNIONS (TEACHER)
SO	UNITED STATES HISTORY
HE	UNIVERSAL EDUCATION
HE	UNIVERSITIES
CE	UNIVERSITIES (ADULT EDUCATION)
HE	UNIVERSITY ADMINISTRATION
HE	UNIVERSITY CONDITIONS AND PROBLEMS
HE	UNIVERSITY EXTENSION
CE	UNIVERSITY EXTENSION (ADULT EDUCATION)
HE	UNIVERSITY EXTENSION PROGRAMS
IR	UNIVERSITY LIBRARIES
HE	UNIVERSITY PUBLIC RELATIONS
HE	UNIVERSITY STUDENTS
CG	UNWED MOTHERS

PS	UNWED MOTHERS (OF PRESCHOOL-AGE CHILDREN)
FL	UNWRITTEN LANGUAGE
CE	URBAN AREAS
SO	URBAN EDUCATION
UD	URBAN EDUCATION
CE	URBAN EXTENSION
SO	URBAN STUDIES
HE	URBAN UNIVERSITIES
CG	URBAN YOUTH
PS	URBAN YOUTH (PRIMARY GRADES)
SO	URBANIZATION
IR	USER STUDIES
TM	VALIDITY
CG	VALUES
SO	VALUES
FL	VERBAL ABILITY
EC	VERBAL ABILITY (HANDICAPPED)
PS	VERBAL ABILITY (PRESCHOOL)
CS	VERBAL COMMUNICATION
SP	VERBAL COMMUNICATION
EC	VERBAL COMMUNICATION (HANDICAPPED)
PS	VERBAL COMMUNICATION (PRESCHOOL)
CS	VERBAL DEVELOPMENT
EC	VERBAL DEVELOPMENT (HANDICAPPED)
PS	VERBAL DEVELOPMENT (PRESCHOOL)
TM	VERBAL TESTS
EA	VERTICAL ORGANIZATION
CE	VETERANS EDUCATION
IR	VIDEO CASSETTE SYSTEMS
IR	VIDEO EQUIPMENT
IR	VIDEO TAPE RECORDING
IR	VIEWING TIME
TM	VISION TESTS
IR	VISUAL ARTS
CS	VISUAL DISCRIMINATION
EC	VISUAL DISCRIMINATION (HANDICAPPED)
PS	VISUAL DISCRIMINATION (PRESCHOOL)
SO	VISUAL DISCRIMINATION (PSYCHOLOGY)
TM	VISUAL MEASURES
CS	VISUAL PERCEPTION
EC	VISUAL PERCEPTION (HANDICAPPED)
PS	VISUAL PERCEPTION (PRESCHOOL)
SO	VISUAL PERCEPTION (PSYCHOLOGY)
EC	VISUALLY HANDICAPPED
EC	VISUALLY IMPAIRED CHILDREN
CS	VOCABULARY
EC	VOCABULARY (HANDICAPPED AND GIFTED)
FL	VOCABULARY (SECOND LANGUAGE)
CS	VOCABULARY DEVELOPMENT
EC	VOCABULARY DEVELOPMENT (HANDICAPPED AND GIFTED)
FL	VOCABULARY DEVELOPMENT (SECOND LANGUAGE)
CE	VOCATIONAL AGRICULTURE
CE	VOCATIONAL AGRICULTURE TEACHERS
CE	VOCATIONAL COUNSELING
CG	VOCATIONAL COUNSELING
CE	VOCATIONAL DEVELOPMENT
CG	VOCATIONAL DEVELOPMENT
CE	VOCATIONAL EDUCATION
JC	VOCATIONAL EDUCATION (JUNIOR COLLEGES)
CE	VOCATIONAL EDUCATION TEACHERS
CE	VOCATIONAL FOLLOWUP
CE	VOCATIONAL INTERESTS
CG	VOCATIONAL INTERESTS
CE	VOCATIONAL REHABILITATION
CG	VOCATIONAL REHABILITATION
EC	VOCATIONAL REHABILITATION (HANDICAPPED CHILDREN)
CE	VOCATIONAL RETRAINING
CE	VOCATIONAL SCHOOLS
CE	VOLUNTARY AGENCIES
CE	VOLUNTEER TRAINING
CE	VOLUNTEERS
PS	VOLUNTEERS (TEACHER AIDES)
SP	VOLUNTEERS (TEACHER AIDES)
EA	VOUCHERS
SP	VOUCHERS
FL	VOWELS
CE	WEEKEND PROGRAMS
CE	WELFARE RECIPIENTS
CE	WHITE COLLAR OCCUPATIONS
SE	WHOLE NUMBERS
EA	WINDOWLESS ROOMS
HE	WOMEN TEACHERS (HIGHER EDUCATION)
HE	WOMENS EDUCATION
SO	WOMENS STUDIES
CE	WOODWORKING
FL	WORD FREQUENCY
IR	WORD FREQUENCY (EDP; AUTOMATIC INDEXING)
CS	WORD RECOGNITION
EC	WORD RECOGNITION (HANDICAPPED AND GIFTED)
CE	WORK ATTITUDES
CG	WORK EXPERIENCE
CE	WORK EXPERIENCE PROGRAMS
CE	WORK STUDY PROGRAMS
CG	WORK STUDY PROGRAMS
HE	WORK STUDY PROGRAMS (COLLEGES AND UNIVERSITIES)
EC	WORK STUDY PROGRAMS (HANDICAPPED)
JC	WORK STUDY PROGRAMS (OFFERED IN JUNIOR COLLEGES)
CS	WORK STUDY SKILLS
CG	WORKING WOMEN
PS	WORKING WOMEN (WITH YOUNG CHILDREN)
SE	WORKSHEETS
CE	WORKSHOPS
SO	WORLD AFFAIRS
SO	WORLD HISTORY
CS	WORLD LITERATURE
SO	WORLD PROBLEMS
CS	WRITING
CS	WRITING EXERCISES
CS	WRITING SKILLS
FL	WRITING SKILLS (FOREIGN LANGUAGE)
CS	WRITTEN LANGUAGE
EA	YEAR ROUND SCHOOLS
CE	YOUNG ADULTS
EC	YOUNG ADULTS (HANDICAPPED AND GIFTED)
CG	YOUTH
CE	YOUTH CLUBS
CE	YOUTH EMPLOYMENT
CE	YOUTH OPPORTUNITY
CG	YOUTH PROBLEMS
CE	YOUTH PROGRAMS
EC	YOUTH PROGRAMS (HANDICAPPED)
SE	ZOOLOGY
SE	ZOOS

PB 173 314
AD 641 092

Standard for Descriptive Cataloging of Government Scientific and Technical Reports

Revision No. 1

Prepared by

Committee on Scientific and Technical Information

Federal Council for Science and Technology

Washington, D. C.

October 1966

Foreword

The Committee on Scientific and Technical Information (COSATI) of the Federal Council for Science and Technology adopted, in 1963, a standard for government-wide use in the descriptive cataloging of government scientific and technical reports. COSATI is composed primarily of officials from Federal agencies responsible for scientific and technical information programs. The standard was a result of continuing COSATI efforts to coordinate and standardize operating procedures among the agencies.

This revised standard provides rules which can be used to produce practical uniformity of descriptive cataloging but which are not expected to provide solutions to all problems relating to cataloging technical reports. Its purpose is:

(1) To provide rules for descriptive cataloging appropriate to the needs of information centers, documentation centers, and the reports departments of libraries.

(2) To provide users with a consistent form of citation and index entries among the products of the various information systems.

(3) To enable government agencies to use each others' descriptive cataloging entries with minimal editorial revision, thereby avoiding costly duplicative effort.

(4) To provide a guide to other organizations and institutions who wish to formulate compatible descriptive cataloging practices.

These rules govern the form of the essential descriptive cataloging elements for scientific and technical reports processed by agencies of the Federal Government. These elements are accession number, corporate author, title, descriptive note, personal author, date, pagination, contract number, report number, availability, supplementary note, and security classification. Additional elements of information and retrieval, such as subject category, descriptors, subject headings, identifiers, abstract numbers, classification numbers, and abstracts, are not included within the scope of this standard.

Many people have contributed to this standard; members of the present Subpanel on Standardization of Descriptive Cataloging are: Chairman, Hubert E. Sauter (CFSTI); Clara L. Fox (AEC); Wanda Z. Ignatieff (DDC); Charles W. Hargrave (NASA); Jeanne M. Holmes (DA); Eleanor J. Aronson (CFSTI); Executive Secretary. Questions concerning the standard, or suggestions for additional rules or clarification and modification of rules, should be addressed to the Chairman at the Clearinghouse for Federal Scientific and Technical Information, U. S. Department of Commerce, Springfield, Va. 22151.

Standard for Descriptive Cataloging of Government Scientific and Technical Reports

Table of Contents

	Section
Accession Number	1
Corporate Author	2
Title	3
Descriptive Note or Subtitle	4
Personal Author	5
Date	6
Pagination	7
Contract Number	8
Report Number	9
Availability	10
Supplementary Note	11
Security Classification	12
Format Suggested for Catalog Cards	13
Indexing Suggested for Technical Reports	14
Abbreviations Used in this Standard	App. 1
Political Subdivisions	App. 2
Transliteration of the Modern Russian Alphabet	App. 3
Accents, Apostrophes, Diacritical Marks	App. 4
Treatment of Surnames with Separately Written Prefixes	App. 5
Index	

1. ACCESSION NUMBER

1.1. Definition. An accession number is assigned for purposes of control by the specific agency performing the cataloging. The number may be newly assigned, may be the accession number assigned by a documentation center, or may be the report number assigned either by the originating agency or the monitoring agen[illegible] depending on the practice of the agency performing the cataloging [illegible] accession number is always preceded by one or more letters.

1.2. At the present time AD numbers (assigned by DDC) and PB or NCH numbers (assigned by CFSTI) are 6-digit numbers; for maximum legibility they may be written with a space replacing the comma that usually appears after the thousands digit:

AD-635 050
PB-170 275
NCH-201 035

NASA accession numbers are written in the form N66-11111.

(Note: See Appendix 1 for a list of abbreviations of agency names used in this standard).

2. CORPORATE AUTHOR

2.1. Definition. Corporate author is the name usually given to the institutional or corporate body preparing the report, which is experimentally (or technically), editorially and/or contractually responsible for the report. Organizations most likely to be involved in issuing scientific and technical reports include: academies, arsenals, associations, business corporations, centers, colleges, companies, councils, establishments, firms, foundations, government agencies, groups, hospitals, institutes, institutions, laboratories, museums, observatories, proving grounds, schools, societies, stations, universities, and their foreign equivalents.

2.1.a. The corporate author is sometimes referred to as the source or originating agency; the government or other agency which is responsible financially for the report and controls its distribution is sometimes referred to as the controlling or monitoring agency.

2.2. The purpose of establishing a corporate author heading is to give the name of the corporate body in a fashion which is easy to identify and possible to retrieve from published indexes and other searching tools.

2.3. Selection of Elements of Corporate Author Headings. Methods of selecting the form of corporate author heading are outlined below and explained in greater detail in later sections.

2.3.a. Only two organizational elements may be chosen from those displayed on the title page and cover of the report.

2.3.b. When two elements are chosen, they are the largest and the smallest elements; the city and state name of the smallest element follows the largest element of the corporate author heading.

Largest Element, Place Name. Smallest Element.
General Electric Co., Huntsville, Ala. Computer Dept.

2.3.c. This selection of elements may be varied only if:

1. A smaller element includes a proper name (see 2.5.a.)
2. A smaller element is the name of an independent company or a major government bureau or service (see 2.5.b.)
3. The report series number assigned by the originator indicates a different level of editorial responsibility (see 2.5 c.)

2. CORPORATE AUTHOR

2.4. General Rules. Catalog from the report in hand, using only those organizational elements that appear on the report. The simplest corporate author heading consists of one organizational name and a geographic name. The number of organizational elements displayed on the report may vary from one to five or six, and some indication of geographic location is usually given. When more than two organizational elements are displayed in the imprint, the corporate author heading includes only two; these two should be the largest and the smallest, and are written

Largest, Place Name. Smallest.
General Electric Co., Cincinnati, Ohio. Nuclear
  Materials and Propulsion Operation.

2.4.a. U. S. is omitted before government headings.

2.4.b. City or state names which repeat part of the name of the main element are omitted. If the subelement includes a geographic name, the geographic name is repeated as part of the subelement.

Massachusetts Inst. of Tech., Cambridge.
Rochester Univ., N. Y.
Burroughs Corp., Radnor, Pa. Radnor Div.
Pratt and Whitney Aircraft, Middletown, Conn. Connecticut
  Advanced Nuclear Engineering Lab.

2.4.c. State names are not abbreviated within a heading, except when used as part of the place name.

State Univ. of New York, Albany.

but Rochester Univ., N. Y.

2.4.d. The name "University of...(city or state)" is always written beginning with the city or state name, regardless of legal and financial relationships; punctuation is not inserted in the inverted form. The names "University of...(geographic region)" and "State University of..." are written without reversal.

Pennsylvania Univ., Philadelphia.
University of Southern California, Los Angeles.
State Univ. of New York, Stony Brook.

2.4.e. Departments of universities are always written in the form "Dept. of...", regardless of the way they appear on the report.

University of Southern California, Los Angeles. Dept.
  of Electrical Engineering.

not University of Southern California, Los Angeles. Electrical
  Engineering Dept.

2. CORPORATE AUTHOR

2.4.f. Departmental committees are written following the name of the department.

Office of Naval Research, Washington, D. C. Committee
on the Basic Properties of Liquid Metals.

2.4.g. Joint committees are written directly under their own names.

Joint Atomic Weapon Technical Information Group.

2.4.h. Abbreviations are not used as the first word of a heading, but are spelled out. An exception is made only when the abbreviation is a legally or officially established element of the corporate title.

Air Force Avionics Lab....not AF Avionics Lab....
Saint Anthony Falls Hydraulic Lab....not St. Anthony...
United States Rubber Co....not U. S. Rubber Co....

2.4.i. If an organization customarily uses an abbreviated form of its official, legal, or chartered name, the abbreviated form is preferred.

Stanford Univ., Calif.

not Leland Stanford Junior Univ., Calif.

2.4.j. If a corporate author changes its name, both old and new forms of the name are retained, with cross references made between them. (See 2.7.a.) A specific report is cataloged under whichever name appears on the publication.

2.4.k. If a report is authored jointly by two or more components of the same organization, the heading should be no more specific than the smallest organizational level common to all components. Excepted are components which include a proper name or reflect a report number series.

Joint authors: General Electric Co., Cincinnati, Ohio
Flight Propulsion Div.
Advanced Engine Technology Dept.

and General Electric Co., Cincinnati, Ohio.
Flight Propulsion Div.
Large Jet Engine Dept.

se: General Electric Co., Cincinnati, Ohio.
Flight Propulsion Div.

2. CORPORATE AUTHOR

2.4.l. The following are the only words which may be abbreviated within the corporate heading.

Air Force Base	AFB
Aktiebolaget	A. B.
Aktiengesellschaft	A. G.
Brothers	Bros.
College	Coll.
Company	Co.
Corporation	Corp.
Department	Dept.
Division	Div.
Gesellschaft mit beschraenkter Haftung	G.m.b.H.
Incorporated	Inc.
Institute	Inst.
Institute of Technology	Inst. of Tech.
Laboratories	Labs.
Laboratory	Lab.
Limited	Ltd.
Manufacturer	Mfr.
Manufacturing	Mfg.
University	Univ.

2.4.m. The following abbreviations are used for U. S. geographic names when used as part of the geographic location; the abbreviations are taken from the Directory of Post Offices, July 1964.

Alabama - Ala.
Alaska - none
Arizona - Ariz.
Arkansas - Ark.
California - Calif.
Canal Zone - none
Colorado - Colo.
Connecticut - Conn.
Delaware - Del.
District of Columbia - D. C.
Florida - Fla.
Georgia - Ga.
Hawaii - none
Idaho - none
Illinois - Ill.
Indiana - Ind.
Iowa - none
Kansas - Kans.
Kentucky - Ky.
Louisiana - La.
Maine - none
Maryland - Md.
Massachusetts - Mass.
Michigan - Mich.
Minnesota - Minn.
Mississippi - Miss.
Missouri - Mo.
Montana - Mont.
Nebraska - Nebr.
Nevada - Nev.
New Hampshire - N. H.
New Jersey - N. J.
New Mexico - N. Mex.
New York - N. Y.
North Carolina - N. C.
North Dakota - N. Dak.
Ohio - none
Oklahoma - Okla.
Oregon - Oreg.
Pennsylvania - Pa.
Puerto Rico - none
Rhode Island - R. I.
South Carolina - S. C.
South Dakota - S. Dak.
Tennessee - Tenn.
Texas - Tex.
Utah - none
Vermont - Vt.
Virgin Islands - none
Virginia - Va.
Washington - Wash.
West Virginia - W. Va.
Wisconsin - Wis.
Wyoming - Wyo.

2.4.n. The Directory is also used to establish the correct form of the place name in cases of doubt. If a branch post office has a ZIP code different from that of the post office, use the name of the branch post office.

Argonne National Lab., Lemont, Ill. See Argonne National Lab., Ill.
(since Argonne is a substation of Lemont but has its own ZIP code)

2.4.o. For military installations use the post office as given in the Directory. For Fleet Post Offices and APO's, use the appropriate ZIP code following the place name, omitting the phrase "APO".

Wright-Patterson AFB, Ohio.
Andrews AFB, Md. Use Washington D. C.
Army Medical Detachment (51st), New York 09108.

2.5. An exception is made to the rule for selecting elements, largest-smallest, from several elements displayed, when one of the subordinate elements: a) includes a proper name; b) is an independent name; or c) is designated as the responsible organizational level by a report series number.

2.5.a. Proper names. A smaller organizational element that begins with a proper name is selected as the secondary or subelement, ignoring other smaller elements in the imprint. Proper names include: a noun not defined in the dictionary, the name of a person, part of the name of a company repeated in the name of the component, an acronymic form of name, and geographic names. The words American and National are considered to be proper names.

Johns Hopkins Univ., Baltimore, Md. Carlyle Barton Lab.
Anaconda American Brass Co., Waterbury, Conn. Anaconda Metal Hose Div.
Bureau of Mines, Morgantown, W. Va. Appalachian Experiment Station.

Note: If there are two subordinate elements, one showing a proper name and one showing a report series, choose the subordinate element represented by the report series.

2.5.a.1. Personal names. If the first element of a heading begins with initials of a personal name, the entry is started with the surname, followed by initials enclosed in parentheses.

Anderson (M. D.) Hospital and Tumor Inst., Houston, Tex.
Goodrich (B. F.) Co., Akron, Ohio.

2.5.a.2. If the first element of a heading begins with a personal forename, and is the name of a company or other commercial/industrial organization (including Associates, Engineers, etc.), the heading starts with the surname, followed by forename and initials enclosed in parentheses.

Little (Arthur D.), Inc., Cambridge, Mass.

2.5.a.3. If the first element of a heading begins with a personal forename, and is the name of a university, laboratory, institute, center, hospital, foundation or other apparently non-commercial organization, the heading is written directly as given.

Harry Diamond Labs., Washington, D. C.

2.5.a.4. If the subordinate element of a heading begins with a personal name, that name is written without rearrangement.

California Inst. of Tech., Pasadena. W. M. Keck Lab. of
  Engineering Materials.

2.5.b. Independent names. A subordinate element of a company is recognizable as an independent corporate entity by words such as Inc., Co., Ltd., Corp., etc., or by the fact that descriptive phrases such as "a division of...", "a subsidiary of...", are not included within the name itself.

Imprint reads: Atomics International
A Division of North American Aviation, Inc.
P.O. Box 309 Canoga Park, California.

Such an independent element is written as a single-element heading with place name, omitting the name of the largest element.

Atomics International, Canoga Park, Calif.

The heading is followed by the name of a still smaller organization element where such is included in the imprint.

2.5.b.1. Major bureaus and services of the U. S. Government are listed as one-element headings, omitting the larger organizational element; any such heading may be followed by the name of the smallest element.

Public Health Service, Washington, D. C.
Bureau of Reclamation, Denver, Colo.
Coast and Geodetic Survey, Washington, D. C.
Agricultural Research Service, Beltsville, Md.

2.5.b.2. If an acronymic report series indicates the editorial responsibility of a subordinate element of a government agency, that element is considered to be independent.

Report number: ASD-TF-61-327
Imprint: Flight Accessories Laboratory
  Aeronautical Systems Division
  Air Force Systems Command
  United States Air Force
  Wright-Patterson Air Force Base, Ohio.

Heading is: Aeronautical Systems Div., Wright-Patterson AFB,
  Ohio. Flight Accessories Lab.

2.5.b.3. Parenthetical identification is added when necessary.

Division of Raw Materials (AEC), Washington, D. C.
Bureau of Medicine and Surgery (Navy), Washington, D. C.
Deputy Chief of Staff, Personnel (Air Force), Washington, D. C.
Adjutant General's Office (Army), Washington, D. C.

2.5.c. Report Series. Many reports include a report series number which indicates the level of organizational and editorial responsibility. Most of these report series include an acronym which can be readily related to one or more of the organizational elements listed in the imprint.

2.5.c.1. For smaller organizational element choose that element indicated by the report series.

Report number: SID-65-933
Imprint: Space Sciences Laboratory
  Space and Information Systems Division
  North American Aviation, Inc., Downey, California

Heading is: North American Aviation, Inc., Downey, Calif.
  Space and Information Systems Div.

Note: For report series in government agency reports, see 2.5.b.2.

2.5.c.2 If the report series indicates a larger-smaller order of responsibility, follow that order in the corporate author heading, selecting the two elements indicated by the report series and ignoring any other elements.

2.6. Foreign corporate author headings. The name of a foreign corporate body is written directly, followed by the name of the city, followed by the name of the country written in parentheses. (See Appendix 2 for a list of geographic names to be used).

Royal Aircraft Establishment, Farnborough (England).

2.6.a. Foreign names are written in the native language, or transliterated from the native language whenever the native form of the name is known; but if the foreign institution chooses to publish all its reports in English under an English form of corporate name, or if the official publications of an institution include the corporate name given in English, use the English form with cross references from the foreign form.

Societa Richerche Impianti Nucleari, Milan (Italy).
Technical Univ. of Denmark, Lyngby.
Danmarks Tekniske Hoejskole, Lyngby. See Technical Univ.
  of Denmark, Lyngby.
Norwegian Defence Research Establishment, Kjeller.
Forsvarets Forskningsinstitutt, Kjeller (Norway).
  See Norwegian Defence Research Establishment, Kjeller.

2. CORPORATE AUTHOR

2.6.b. Names of foreign cities are not abbreviated; names of foreign countries are not abbreviated except for USSR. (See Appendix 2). The name of the country is not repeated if included in the heading.

Australian National Univ., Canberra.
Centro Brasileiro de Pesquisas Fisicas, Rio de Janeiro.

2.6.c. Foreign place names used as filing points are written in the form of common usage as indicated by the Board on Geographic Names; when the name forms an integral part of the heading, retain the native form.

Turin Univ. (Italy).

but Politecnico di Milano (Italy).

2.6.d. Foreign universities are written in the same way as American universities. If the name of the university begins with the foreign equivalent of "University of...(place name)," write the place name first and abbreviate the foreign form of "university" to "Univ.".

Universidad de Barcelona. See Barcelona Univ. (Spain).
Universidade do Brasil, Rio de Janeiro. See Brazil Univ.,
  Rio de Janeiro.
Universita degli Studi, Milan. See Milan Univ. (Italy).
Universitaet Wien. See Vienna Univ. (Austria).
Universite de Paris. See Paris Univ. (France).
Universiteit van Amsterdam. See Amsterdam Univ. (Netherlands)
Universitetet i Oslo. See Oslo Univ. (Norway).

2.6.e. If a foreign university commonly prefers the form "University of (place name)" to the official version of its name, use the place name version.

Kiel Univ. (West Germany).
Christian Albrechts Universitaet, Kiel (West Germany).
  See Kiel Univ. (West Germany).

2.6.f. Technische Hochschule is written using the common form of place name and omitting the formal portion of the name.

Technische Hochschule, Karlsruhe (West Germany).
Technische Hochschule Fridericiana, Karlsruhe (West
  Germany). See Technische Hochschule, Karlsruhe
  (West Germany).

2. CORPORATE AUTHOR

2.6.g. All other forms of name are retained as written.

Pontificia Universidade Catolica do Rio de Janeiro (Brazil).

2.6.h. Foreign scientific academies are written as the name of the academy, followed by place and country. (Name of country is omitted when included in the name of the academy).

Akademiya Nauk SSSR, Moscow.

not Akademiya Nauk SSSR, Moscow (USSR).

2.6.i. Institutes, sections, etc. of foreign academies are written following the name of the academy, place, and country. If an institute name from a Russian or a satellite country is followed by a personal name omit the personal name.

Akademiya Nauk Kazakhskoi SSR, Leningrad. Fiziko-Tekhnicheskii
  Institut. (Omit "im. A. F. Ioffe").

2.6.j. All other foreign institutes, not connected with their nationa academies are written directly.

Institut Inzhenerov Zheleznodorozhnogo Transporta,
  Dnepropetrovsk (USSR).

2.7. Rules for making cross references to and from corporate author headings. Cross references indicate a relationship between two corporate author headings. A see reference indicates an unacceptable form of heading; the existence of the reference is recorded on the preferred form of heading by an x (refer from) reference.

Navy Dept., Washington, D. C. See Department of the Navy,
  Washington, D. C.

Department of the Navy, Washington, D. C.
  x Navy Dept., Washington, D. C.

2.7.a. A change in the name of a corporate author is covered by an sa (see also) reference which refers the user to the later names. The xx (refer also from) reference indicates the previous names.

Clinton Labs., Oak Ridge, Tenn.
  sa Clinton National Lab., Oak Ridge, Tenn. (later name)
  sa Oak Ridge National Lab., Tenn. (later name)

Clinton National Lab., Oak Ridge, Tenn.
  sa Oak Ridge National Lab., Tenn. (later name)
  xx Clinton Labs., Oak Ridge, Tenn. (former name)

Oak Ridge National Lab., Tenn.
  xx Clinton Labs., Oak Ridge, Tenn. (former name)
  xx Clinton National Lab., Oak Ridge, Tenn. (former name)

2.7.b. If the smaller part of the organizational name might appear on some other report without full identification, make a cross reference from the name of the smaller part.

Committee on Foods (NAS-NRC), Washington, D. C. See National Academy of Sciences-National Research Council, Washington, D. C. Committee on Foods.

Institut fuer Theoretische Physik, Graz (Austria). See Graz Univ. (Austria). Institut fuer Theoretische Physik.

Laboratoire de Chimie Physique, Paris (France). See Paris Univ. (France). Laboratoire de Chimie Physique.

2.7.c. Make a see reference from alternate forms of the name.

Danmarks Tekniske Hoejskole, Lyngby. See Technical Univ. of Denmark, Lyngby.

2.7.d. Make cross referrces to show organizational elements that have been omitted in the heading.

Office of Naval Research, Washington, D. C. Naval Research Lab. See Naval Research Lab., Washington, D. C.

California Univ., Berkeley. Dept. of Physics. Cosmic Ray Group. See California Univ., Berkeley. Cosmic Ray Group.

Air Force Systems Command, Wright-Patterson AFB, Ohio. AF Aero Propulsion Lab. See Air Force Aero Propulsion Lab., Wright-Patterson AFB, Ohio.

Research and Technology Div., Wright-Patterson AFB, Ohio. AF Aero Propulsion Lab. See Air Force Aero Propulsion Lab., Wright-Patterson AFB, Ohio.

2.7.e. Make cross references from acronyms and abbreviations.

AEC. See Atomic Energy Commission, Washington, D. C.

2.7.f. When establishing a heading for a foreign corporate body, a cross reference from the name of the foreign country may be included. (See Appendix 2).

Instituto Venezolano de Investigaciones Cientificas, Caracas.
  x Venezuela. Instituto Venezolano de Investigaciones
      Cientificas, Caracas.

3. TITLE

3.1. A simple title, as given on the title page, describes the report without superfluous elements. Complex titles may take one of several forms. Frequently two titles may appear on the title page: one is the specific title of the report in hand, the other is the title of the project or overall series of reports. Examination of the report or of the previous reports will usually disclose this. Or, one title may be meaningful and have some subject content, and the other be a description such as Final Report, Technical Report, Progress Report for the Period..., Quarterly Technical Status Report, etc. (See 4. Descriptive Note or Subtitle).

3.2. If the title as given in the report is a two-part title, start with the specific title followed by the descriptive portion of the title:

Title on report: QUARTERLY PROGRESS REPORT
ON
NUCLEAR BATTERIES

Title as cataloged: NUCLEAR BATTERIES. Quarterly progress report.

3.3. A title should be meaningful if possible; however, if the only title given on the report consists of a phrase of the type listed above (See 4. Descriptive Note or Subtitle) as a descriptive note or supplementary note, that phrase or note should be used.

3.4. Many titles as they appear on the title page use spacing in place of punctuation; punctuation should be supplied whenever the title as run together no longer makes sense:

Title on report: BYRD STATION SNOW TUNNELS
WALL CLEARING STUDY

Title as cataloged: BYRD STATION SNOW TUNNELS. WALL CLEARING STUDY.

Punctuation of the title is changed only when necessary.

3. TITLE

3.5. Dates appearing as part of the formal title in all capital letters should be spelled out in the same manner as given in the report.

> PROCEEDINGS OF THE...CONFERENCE ON...HELD AT THE MUSEUM OF SCIENCE AND INDUSTRY, CHICAGO, ILLINOIS, OCTOBER 4, 5, AND 6, 1960.

3.6. Titles of conferences, meetings, symposia and the like may be rearranged to permit meaningful interfiling by deleting the number of the conference from the body of the name and inserting it in numerical form at the end of the conference name:

> SIXTH ANNUAL ARMY HUMAN FACTORS ENGINEERING CONFERENCE.

may be written as

> ANNUAL ARMY HUMAN FACTORS ENGINEERING CONFERENCE (6th).

or HUMAN FACTORS ENGINEERING CONFERENCE (6th ANNUAL ARMY).

4. DESCRIPTIVE NOTE OR SUBTITLE

4.1. Definition. A descriptive note, or subtitle, is a title without subject content which describes the type of report, such as Final Report, Technical Report, Progress Report for the Period..., Quarterly Technical Status Report, etc.

4.2. The descriptive note is written immediately following the title:

ELECTROCHEMISTRY. Interim technical progress report.

THE PERSISTATRON UTILIZING A SUPERCONDUCTIVE GROUND
PLANE. Final report.

5. PERSONAL AUTHOR

5.1. Definition. The author is the name of the person or persons who performed the research and/or wrote the report.

5.2. The names are written in full as given on the report, omitting titles, degrees, and other honorifics; the names may be written in either the direct or indirect form.

5.3. Personal author names may be found on reports on the cover, the title page, or at the end of the report; these names should be selected in the following order of preference:

Unaccompanied by any qualifying words but by location may
  be assumed to be the author(s) of the report
Identified as the person(s) preparing the report
Identified as compiler(s) or editor(s)
Identified as person submitting the report
Identified as the principal investigator

5.4. Names of translators are omitted. (See also 11.3. Supplementary Note).

5.5. Names identified only within the text as the persons doing the work, or as the project manager or director of the work, are not used in the descriptive cataloging.

5.6. Russian names are written as shown in Appendix 3. If another transliteration scheme has been used on the report, an attempt should be made to re-derive the approved transliteration from the Russian form; both forms of the name may be included, writing first the re-derived form of name, followed by that given on the report.

N. I. Shuikin, (N. I. Choukine).

5.7. If a surname includes a prefix, either as a part of the surname or separated from the surname, include the prefix as part of the name:

De Geer, G.

5.7.a. If the cataloging agency has an extensive collection of foreign material, the following rule for indexing may be applied. Some surnames are preceded by a separately written prefix, which may be written at the beginning of the index entry, or following the name of the author at the end of the index entry, depending on the language of the author; a cross reference between the two forms may be supplied. The language of the author is determined by the corporate source of the specific report; if the source is American, the language of the author is defined as English; if the source is Italian, the language of the author is defined as Italian
The methods for treating such prefixes are listed in Appendix 5.

6. DATE

6.1. Definition. The date chosen is the date of publication, whenever known.

6.2. If no date appears on the title page or cover, one of the following may be used:

Date work completed
Date submitted
Date typed

6.3. If no dates are given, a date may be supplied:

If the date of the latest bibliographic reference is that of the current year, the year may be supplied in brackets, e.g., [1966].

If the decade is certain, give date as [195-].

If the report is received in the current year, and includes a report number which is compatible with the current year, give date as current, e.g., [1966].

(Note: The usual brackets may be replaced with other punctuation to satisfy machine requirements).

7. PAGINATION

7.1. Definition. Pagination is the total number of pages, whether numbered or unnumbered, in the report. This includes covers if they contain information, diagrams, charts, illustrations, maps, photos, foldouts, pocket material, etc. The pagination provides the research worker with an indication of the length of the report, and corresponds to the number of frames necessary for microfiche reproduction.

7.2. List the number of pages, followed by the letter p.

8. CONTRACT NUMBER

8.1. Definition. The contract number is the numeric identifier of the contract, grant, or order cited in the report which designates the financial support of the report.

8.2. The contract number may be supplied if the information is not on the report but is available elsewhere.

8.3. In order to obtain maximum interagency uniformity of cataloging, contract numbers should be written in a manner conforming as closely as possible to the way in which they are cited on the reports.

Contract AF 33(657)-8146
Grant AF-AFOSR-62-347
Grant AF-EOAR-62-117
ARPA Order-363
Contract AT(11-1)-490
Grant Cwb-WBG-6
Contract DA-36-039-sc-87274
Grant DA-SIG-36-039-62-G34
Contract NAS3-2121
NASA Order-R-93
Contract NObs-86871
Contract Nonr-2189(03)
Grant Nonr(G)-00037-62
Grant NSF-GP-2528
Grant NsG-333
Grant VRA-RD-1201M-64

8.5. Editing of the form of the contract number should be required only in the case of an individual deviation. The form which is consistent with examples taken from the reports of the same or related contracts is used.

Contract AT-11-1-GEN-16 }
Contract AT(11-1)-GEN-16 } use Contract AT(11-1)-GEN-16 for both.

8.6. Project numbers or names may be noted with identifying acronyms. Service project numbers, Corps, Division and Bureau project numbers, as well as non-DoD project numbers, may be used following the identifying acronym. Two project numbers may be cited.

Proj. AF-4782
DA-TB4-001
MR005.13-1002
MOHOLE
MR-013-111
ORA-4528
SQUID
SRI-3670

Two task numbers may be noted.

Task 478203, 749102

9. REPORT NUMBER

9.1. Definition. The report number may be the unique number assigned to the report by the corporate author or originating agency, or it may be the unique number assigned to the report by an agency other than the originating agency. Both types of report number may appear on the same document.

9.2. The indexing for a report number should follow as closely as possible the way the number appears on the report for maximum ease of identification. Include all report numbers given on the report, listed in any convenient order. If the number is given in two ways on the report, for example, in a short form on the cover and a more explicit form on the title page, use the short form.

NASA Contractor Report 263 }
NASA CR-263 } use NASA-CR-263

9.3. Many report numbers appear on the report in an easily indexed form, consisting of letters representing the originating or monitoring agency followed by a unique number. The only editing required in such a number is to insert a hyphen wherever a space appears in order to assure uniformity of machine sorting.

ASD-TDR-63-24
NASA-TN-D-1076
UCRL-1035

9.4. Many report numbers consist of a combination of letters and numbers but the letters do not represent the originating or monitoring agency. Write such numbers as they are given on the report, inserting a hyphen wherever a space appears but otherwise retaining the punctuation.

R64D61
RM-4244-PR
TM/ADC/820/302/03

9.5. If the machine system does not contain an ampersand, that symbol is replaced by a slash.

A&ES-64-8 becomes A/ES-64-8

9.6. If a single report number is issued in several parts, this information is added to the report number in abbreviated form, using hyphens, not commas or parentheses, for separation.

AL-TDR-64-130-Pt-2-Vol-1

The following words may be abbreviated without final punctuation:

Addendum	Add
Amendment	Amend
Appendix	App
Book	Bk
Chapter	Ch
Number	No
Part	Pt
Revised	Rev
Revision	Rev
Section	Sect
Series	Ser
Summary	Summ
Supplement	Suppl
Volume	Vol

9.6.a. Roman numerals in such abbreviations are changed to the Arabic form.

JPL-SPS-37-25-Vol-4
not JPL-SPS-37-25-Vol-IV

9.7. If there are no identifying letters included in the report number, initials or an acronym for the corporate author may be supplied from elsewhere on the report.

JPL Technical Report 34-104 becomes JPL-TR-34-104

9.8. Many report numbers include descriptive words within the number; these words may either be ignored or abbreviated. The words are ignored when the numbers form one series regardless of the descriptive words; they are abbreviated when there are two or more series of numbers, each associated with a specific group of words. Abbreviations which are frequently used are:

Bulletin	Bull-
Circular	Circ-
Contribution	Contrib-
Memo.	M-
Memo. report	MR-
Publication	Pub-
Reference	Ref-
Report	see 9.9
Research memo.	RM-
Research paper	RP-
Research report	RR-
Special report	SR-
Technical memo.	TM
Technical note	TN-
Technical publication	TP-
Technical report	TR-
Technical translation	TT-
Translation	Trans-

9.9. The word report may be ignored, and replaced by a hyphen.

NRL Report 5914 becomes NRL-5914

unless the number as stated includes the abbreviation "R."

AED-R-2117

9.10. Some reports are published in a definite series without initial or an acronym but with a phrase describing the series. The explanator phrase may be included as part of the report number, omitting the word "report", and abbreviating toward the end of the phrase when necessary to suit the limits of the individual machine system.

Flight Sciences Laboratory Report No. 65 becomes
Flight Sciences Lab-65

10. AVAILABILITY

10.1. Definition. This information includes availability for distribution, release or disclosure, and limitations on availability.

10.2. Some reports are not available to the public, but are available to the specific community served by the cataloging agency. Such limited availability may be noted either here, or in the general instructions accompanying distribution of the cataloging information.

10.3. Information as to the availability, or limitation on the availability, of a report should be given in an abbreviated form if possible. (For security classification see 12.) Variety of physical format is also noted when known. Possible abbreviations that may be used for this type of information are:

Hard Copy (full-size or 2/3 full size)	HC or cy
Photostat	ph
Facsimile	fs
Microfiche (micronegative)	MF or mn
Microfilm	mi or mf
Microcard	MC

Such availability may be noted as:

CFSTI HC $0.50 MF $0.50

Other abbreviations may be used if they are readily understandable in the context or explained elsewhere in the specific journal.

11. SUPPLEMENTARY NOTE

11.1. Definition. A supplementary note is a statement of information about the report which is not included elsewhere in the descriptive cataloging.

11.2. Examples of such notes are:

Prepared in cooperation with...(joint corporate author).
Trans. of mono. (paper) presented to the Working Group of
  AFCALTI on Symbolic Languages, 1961.
Unedited rough draft trans. of Patent (USSR) 159 193.
Sponsored by... (when no contract number is known).
Text in French; summary in English.
Presented at Conference on...
Submitted for publication to...
Previously announced as...
Available copy will not permit legible reproduction.
Available copy will not permit fully legible reproduction.

11.3. Information about translators may be included in the supplementary note.

Trans. of Tsement (USSR) v27 n2 p17-22 1961, by Mary Smith.

11.4. Reports which are available in the published literature should be indicated as

Pub. in...(journal citation)

12. SECURITY CLASSIFICATION

12.1. Definition. Security classification is the designation on the document which signifies that it has been determined that the document requires, in the interests of national defense, a specific degree of protection against unauthorized disclosure. The designation can be Confidential, Secret, etc., and is to be found on the front and back covers of the document according to specific security regulations.

12.2. If there is a designation of a security classification on the document, this designation is picked up. The citation or the catalog card must indicate the security classification.

13. FORMAT SUGGESTED FOR CATALOG CARDS

13.1. This format for catalog cards is suggested for legibility and ease of identification of the more important descriptive elements; th latter may be marked on the card without retyping, and used as filinc points in a manually-maintained catalog.

13.2. The suggested order for presentation of the elements is: accession number, corporate author (initial capitals), title (all capitals), descriptive note, personal author (initial capitals), date, pagination, contract number, report number, availability, and supplementary note. The underlined elements are brought to the left margin for emphasis and ease of marking for filing.

13.3. Availability and supplementary note are usually presented as a drop note, and not included in the body of the descriptive cataloging

13.4. The security classification of the catalog card itself should be noted in accordance with the security regulations of the specific agency.

AD-623 665
California Univ., Berkeley. Operations Research
  Center.
AN EXTENSION OF GENERALIZED UPPER BOUNDED TECHNIQUES
FOR LINEAR PROGRAMMING. Research report.
R. N. Kaul. 1965, 33p.
Contracts DA-31-124-ARO(D)-331, Nonr-222(83)
ORC-65-27; AROD-5307:5

CFSTI HC $2.00 MF $0.50

14. INDEXING SUGGESTED FOR TECHNICAL REPORTS

14.1. The following descriptive elements provide useful index entries in an abstract journal, or useful filing points in a manual catalog: accession number, corporate author, title, personal author, contract number, report number. The index entry is identified or the machine tape to be used by itself or in conjunction with another element; the filing point is marked on the catalog card.

14.2. Corporate author indexing. The index entry may be combined with the title or with the corporate author's report number for rapid identification in searching.

14.3. Title indexing. The index entry may be modified to eliminate insignificant words and add significant words. If the title is to be used as the secondary element in conjunction with another index entry, such as corporate author, personal author, or subject, modification of the title may be desired; if the title is to be filed as a single element for searching, at least one card should be filed without modification.

14.4. Personal author indexing. The index entry may be combined with the title for ease of identification in searching.

14.5. Contract number indexing. The index entry may be combined with the title, or with information included in the descriptive note, such as progress reports of all types, and technical reports, technical notes, and technical memoranda which are numbered with respect to the contract.

14.6. Report number indexing. The index entry may stand alone, or be combined with the corporate author where appropriate.

14.7. Filing. In arranging headings in alphabetic order by corporate name, the alphabetizing may proceed word by word, with the shorter of any two words being filed ahead of the longer one which includes all of the first.

North Texas State Univ., Denton.
Northern Research and Engineering Corp., Cambridge, Mass.

Abbreviations are filed in their normal alphabetic position as words, unless the abbreviation includes spaces or punctuation.

A R F Products, Inc., River Forest, Ill.
Aberdeen Proving Ground, Md.
Argonne National Lab., Ill.
ARINC Research Corp., Washington, D. C.

APPENDIX 1

Abbreviations Used in this Standard

The following abbreviations for agency names have been used in this Standard:

AEC	Atomic Energy Commission
CFSTI	Clearinghouse for Federal Scientific and Technical Information
DA	Department of Agriculture
DDC	Defense Documentation Center
DoD	Department of Defense
GPO	Superintendent of Documents, Government Printing Office
NASA	National Aeronautics and Space Administration

APPENDIX 2

Political Subdivisions

The following list gives, in the first column, names of political subdivisions as they may appear on the report; the other two columns indicate the manner of referring to the country within the heading or in parts of the cross reference structure. (Principal source: Board on Geographic Names).

Name of Political Subdivision	Name Used Within Parentheses	Name Used as Filing Point in Cross Reference or Coding Structure
Aberdeen, -shire	Scotland	United Kingdom
Abyssinia	Ethiopia	Ethiopia
Afghanistan	Afghanistan	Afghanistan
Albania	Albania	Albania
Alberta	Alberta	Canada
Algeria	Algeria	Algeria
Andhra Pradesh	India	India
Andorra	Andorra	Andorra
Anglesey	Wales	United Kingdom
Angus	Scotland	United Kingdom
Argentina	Argentina	Argentina
Argyll, -shire	Scotland	United Kingdom
Armenia	USSR	USSR
Assam	India	India
Australia	Australia	Australia
Australian Capital Territory	Australia	Australia
Austria	Austria	Austria
Ayre, -shire	Scotland	United Kingdom
Azerbaijan	USSR	USSR
Banff, -shire	Scotland	United Kingdom
Bedford, -shire	England	United Kingdom
Belgian Congo	Congo	Congo
Belgium	Belgium	Belgium
Belorussia	USSR	USSR
Bengal	India	India
Berkshire	England	United Kingdom
Berwick, -shire	Scotland	United Kingdom
Bhutan	Bhutan	Bhutan
Bihar	India	India
Bolivia	Bolivia	Bolivia
Bombay	India	India

Name of Political Subdivision	Name Used Within Parentheses	Name Used as Filing Point in Cross Reference or Coding Structure
Brazil	Brazil	Brazil
Brecknock, -shire	Wales	United Kingdom
British Columbia	British Columbia	Canada
British Commonwealth	- See Name of Individual	State
Buckingham, -shire	England	United Kingdom
Bulgaria	Bulgaria	Bulgaria
Burma	Burma	Burma
Burundi	Burundi	Burundi
Bute, -shire	Scotland	United Kingdom
Caernarvon, -shire	Wales	United Kingdom
Caithness	Scotland	United Kingdom
Cambodia	Cambodia	Cambodia
Cambridge, -shire	England	United Kingdom
Cameroon	Cameroon	Cameroon
Canada	Name of Individual Province	Canada
Cardigan, -shire	Wales	United Kingdom
Carmarthen, -shire	Wales	United Kingdom
Central African Republic	Central African Republic	Central African Republic
Ceylon	Ceylon	Ceylon
Chad	Chad	Chad
Cheshire	England	United Kingdom
Chile	Chile	Chile
China	Mainland China or Taiwan	China
Clackmannan, -shire	Scotland	United Kingdom
Colombia	Colombia	Colombia
Congo (Brazzaville)	Congo	Congo
Congo (Leopoldville)	Congo	Congo
Cornwall	England	United Kingdom
Costa Rica	Costa Rica	Costa Rica
Cuba	Cuba	Cuba
Cumberland	England	United Kingdom
Cyprus	Cyprus	Cyprus
Czechoslovakia	Czechoslovakia	Czechoslovakia
Dahomey	Dahomey	Dahomey
Denbigh, -shire	Wales	United Kingdom
Denmark	Denmark	Denmark

Name of Political Subdivision	Name Used Within Parentheses	Name Used as Filing Point in Cross Reference or Coding Structure
Derby, -shire	England	United Kingdom
Devon, -shire	England	United Kingdom
Dominican Republic	Dominican Republic	Dominican Republic
Dorset, -shire	England	United Kingdom
Dumbarton, -shire	Scotland	United Kingdom
Dumfries, -shire	Scotland	United Kingdom
Durham	England	United Kingdom
East Germany	East Germany	Germany
East Lothian	Scotland	United Kingdom
Ecuador	Ecuador	Ecuador
Egypt	Egypt	Egypt
Eire	Ireland	Ireland
El Salvador	El Salvador	El Salvador
England	England	United Kingdom
Essex	England	United Kingdom
Estonia	USSR	USSR
Ethiopia	Ethiopia	Ethiopia
Federal Republic of Germany	West Germany	Germany
Federation of Malaysia	Malaysia	Malaysia
Fife, -shire	Scotland	United Kingdom
Finland	Finland	Finland
Flint, -shire	Wales	United Kingdom
Formosa	Taiwan	China
France	France	France
French Community - See Name of Individual State		
Gabon Republic	Gabon Republic	Gabon Republic
Gambia	Gambia	Gambia
Georgia	USSR	USSR
German Democratic Republic	East Germany	Germany
German Federal Republic	West Germany	Germany
Germany	East or West Germany	Germany
Ghana	Ghana	Ghana
Glamorgan, -shire	Wales	United Kingdom
Gloucester, -shire	England	United Kingdom
Great Britain	See Name of Country	United Kingdom
Greece	Greece	Greece

Name of Political Subdivision	Name Used Within Parentheses	Name Used as Filing Point in Cross Reference or Coding Structure
Gruziya	USSR	USSR
Guatemala	Guatemala	Guatemala
Guinea	Guinea	Guinea
Gujarat	India	India
Haiti	Haiti	Haiti
Hampshire	England	United Kingdom
Hashemite Kingdom of Jordan	Jordan	Jordan
Hereford, -shire	England	United Kingdom
Hertfordshire	England	United Kingdom
Honduras	Honduras	Honduras
Hong Kong	Hong Kong	Hong Kong
Hungary	Hungary	Hungary
Huntingdon, -shire	England	United Kingdom
Hyderabad	India	India
Iceland	Iceland	Iceland
India	India	India
Indonesia	Indonesia	Indonesia
Inverness, -shire	Scotland	United Kingdom
Iran	Iran	Iran
Iraq	Iraq	Iraq
Ireland	Ireland	Ireland
Ireland (Northern)	Northern Ireland	United Kingdom
Islamic Republic of Mauritania	Mauritania	Mauritania
Israel	Israel	Israel
Italy	Italy	Italy
Ivory Coast	Ivory Coast	Ivory Coast
Jamaica	Jamaica	Jamaica
Japan	Japan	Japan
Jordan	Jordan	Jordan
Kazakhstan	USSR	USSR
Kent	England	United Kingdom
Kenya	Kenya	Kenya

Name of Political Subdivision	Name Used Within Parentheses	Name Used as Filing Point in Cross Reference or Coding Structure
Kerala	India	India
Kincardine, -shire	Scotland	United Kingdom
Kinross, -shire	Scotland	United Kingdom
Kirghizia	USSR	USSR
Kirkcudbright, -shire	Scotland	United Kingdom
Korea	North Korea or South Korea	Korea
Kuwait	Kuwait	Kuwait
Lanark, -shire	Scotland	United Kingdom
Lancashire	England	United Kingdom
Laos	Laos	Laos
Latvia	USSR	USSR
Lebanon	Lebanon	Lebanon
Liberia	Liberia	Liberia
Libya	Libya	Libya
Liechtenstein	Liechtenstein	Liechtenstein
Lincoln, -shire	England	United Kingdom
Lithuania	USSR	USSR
London	England	United Kingdom
Luxembourg	Luxembourg	Luxembourg
Madagascar	Malagasy Republic	Malagasy Republic
Madhya Pradesh	India	India
Madras	India	India
Maharashtra	India	India
Mainland China	Mainland China	China
Malagasy Republic	Malagasy Republic	Malagasy Republic
Malawi	Malawi	Malawi
Malaysia	Malaysia	Malaysia
Mali	Mali	Mali
Malta	Malta	Malta
Manitoba	Manitoba	Canada
Mauritania	Mauritania	Mauritania
Merioneth, -shire	Wales	United Kingdom
Mexico	Mexico	Mexico
Middle Congo	Congo	Congo
Middlesex	England	United Kingdom
Midlothian	Scotland	United Kingdom
Moldavia	USSR	USSR
Monaco	Monaco	Monaco

Name of Political Subdivision	Name Used Within Parentheses	Name Used as Filing Point in Cross Reference or Coding Structure
Mongolia	Mongolia	Mongolia
Monmouth, -shire	England	United Kingdom
Montgomery, -shire	Wales	United Kingdom
Moray, -shire	Scotland	United Kingdom
Morocco	Morocco	Morocco
Mysore	India	India
Nagaland	India	India
Nairn, -shire	Scotland	United Kingdom
National Republic of China	Taiwan	China
Nepal	Nepal	Nepal
Netherlands	Netherlands	Netherlands
New Brunswick	New Brunswick	Canada
New South Wales	Australia	Australia
New Zealand	New Zealand	New Zealand
Newfoundland	Newfoundland	Canada
Nicaragua	Nicaragua	Nicaragua
Niger	Niger	Niger
Nigeria	Nigeria	Nigeria
Norfolk	England	United Kingdom
North Korea	North Korea	Korea
North Vietnam	North Vietnam	Vietnam
Northampton, -shire	England	United Kingdom
Northern Ireland	Northern Ireland	United Kingdom
Northern Rhodesia	Zambia	Zambia
Northern Territory	Australia	Australia
Northumberland	England	United Kingdom
Northwest Territories	Northwest Territories	Canada
Norway	Norway	Norway
Nottingham, -shire	England	United Kingdom
Nova Scotia	Nova Scotia	Canada
Nyasaland	Malawi	Malawi
Ontario	Ontario	Canada
Orissa	India	India
Orkney	Scotland	United Kingdom
Outer Mongolia	Mongolia	Mongolia
Oxford, -shire	England	United Kingdom

Name of Political Subdivision	Name Used Within Parentheses	Name Used as Filing Point in Cross Reference or Coding Structure
Pakistan	Pakistan	Pakistan
Panama	Panama	Panama
Paraguay	Paraguay	Paraguay
Peebles, -shire	Scotland	United Kingdom
Pembroke, -shire	Wales	United Kingdom
People's Republic of... See Name of Individual Republic		
Perth, -shire	Scotland	United Kingdom
Peru	Peru	Peru
Philippines	Philippines	Philippines
Poland	Poland	Poland
Portugal	Portugal	Portugal
Prince Edward Island	Prince Edward Island	Canada
Punjab	India	India
Quebec	Quebec	Canada
Queensland	Australia	Australia
R. P. R.	Rumania	Rumania
Radnor	Wales	United Kingdom
Rajasthan	India	India
Renfrew, -shire	Scotland	United Kingdom
Republic of... See Name of Individual Republic		
Rhodesia	Rhodesia	Rhodesia
Romania	Rumania	Rumania
Ross and Cromarty	Scotland	United Kingdom
Roxburgh, -shire	Scotland	United Kingdom
Ruanda-Urundi	Burundi or Rwanda	Burundi or Rwanda
Rumania	Rumania	Rumania
Russian Soviet Federated Socialist Republic	USSR	USSR
Rutland	England	United Kingdom
Rwanda	Rwanda	Rwanda
San Marino	San Marino	San Marino
Saskatchewan	Saskatchewan	Canada
Saudi Arabia	Saudi Arabia	Saudi Arabia
Scotland	Scotland	United Kingdom
Selkirk, -shire	Scotland	United Kingdom
Senegal	Senegal	Senegal

Name of Political Subdivision	Name Used Within Parentheses	Name Used as Filing Point in Cross Reference or Coding Structure
Shetland	Scotland	United Kingdom
Shropshire	England	United Kingdom
Siam	Thailand	Thailand
Sierra Leone	Sierra Leone	Sierra Leone
Singapore	Singapore	Singapore
Somalia	Somalia	Somalia
Somerset, -shire	England	United Kingdom
South Africa	South Africa	South Africa
South Australia	Australia	Australia
South Korea	South Korea	Korea
South Vietnam	South Vietnam	Vietnam
Southern Rhodesia	Rhodesia	Rhodesia
Spain	Spain	Spain
Stafford, -shire	England	United Kingdom
Stirling, -shire	Scotland	United Kingdom
Sudan	Sudan	Sudan
Sudanese Republic	Mali	Mali
Suffolk	England	United Kingdom
Surrey	England	United Kingdom
Sussex	England	United Kingdom
Sutherland	Scotland	United Kingdom
Sweden	Sweden	Sweden
Switzerland	Switzerland	Switzerland
Syria	Syria	Syria
Tadzhikistan	USSR	USSR
Taiwan	Taiwan	Taiwan
Tanganyika	Tanzania	Tanzania
Tanzania	Tanzania	Tanzania
Tasmania	Tasmania	Tasmania
Thailand	Thailand	Thailand
Tibet	Tibet	Tibet
Tobago	Trinidad and Tobago	Trinidad and Tobago
Togo	Togo	Togo
Trinidad	Trinidad and Tobago	Trinidad and Tobago
Tunisia	Tunisia	Tunisia
Turkey	Turkey	Turkey
Turkmenistan	USSR	USSR

Name of Political Subdivision	Name Used Within Parentheses	Name Used as Filing Point in Cross Reference or Coding Structure
Ubangi-Shari	Central African Republic	Central African Republic
Uganda	Uganda	Uganda
Ukraine	USSR	USSR
Union of South Africa	South Africa	South Africa
United Arab Republic	Egypt	Egypt
United Kingdom	See England, Northern Ireland, Scotland, Wales	United Kingdom
United Republic of Tanzania	Tanzania	Tanzania
Upper Volta	Upper Volta	Upper Volta
Uruguay	Uruguay	Uruguay
USSR	USSR	USSR
Uttar Pradesh	India	India
Uzbekistan	USSR	USSR
Vatican City State	Vatican City State	Vatican City State
Venezuela	Venezuela	Venezuela
Victoria	Australia	Australia
Vietnam	North or South Vietnam	Vietnam
Wales	Wales	United Kingdom
Warwick, -shire	England	United Kingdom
West Bengal	India	India
West Germany	West Germany	Germany
West Lothian	Scotland	United Kingdom
Western Australia	Australia	Australia
Western Samoa	Western Samoa	Western Samoa
Westmorland	England	United Kingdom
Wigtown, -shire	Scotland	United Kingdom
Wiltshire	England	United Kingdom
Worcester, -shire	England	United Kingdom
Yemen	Yemen	Yemen
York, -shire	England	United Kingdom
Yugoslavia	Yugoslavia	Yugoslavia
Yukon	Yukon	Canada
Zambia	Zambia	Zambia
Zanzibar	Tanzania	Tanzania

APPENDIX 3

Transliteration of the Modern Russian Alphabet

Russian names are written as transliterated according to the modification of the Russian portion of British Standard Institution's (British Standard 2979:1958) system which has been proposed as a standard by the American Standards Association, and made available in published form by the National Federation of Science Abstracting and Indexing Services as NFSAIS Standard no. 63-1. Deviations are listed below.

é becomes e
ë becomes e
ĭ becomes i

Apostrophe (') and quotation mark (") are ignored; when they occur in the middle of a word, the space is closed.

Russian	Printed Russian Italic	Hand Writing	Transliteration	Russian	Printed Russian Italic	Hand Writing	Transliteration
1. А а	*А а*	*Аа*	a	18. Р р	*Р р*	*Рр*	r
2. Б б	*Б б*	*Бб*	b	19. С с	*С с*	*Сс*	s
3. В в	*В в*	*Вв*	v	20. Т т	*Т т*	*Тт*	t
4. Г г	*Г г*	*Гг*	g	21. У у	*У у*	*Уу*	u
5. Д д	*Д д*	*Дд*	d	22. Ф ф	*Ф ф*	*Фф*	f
6. Е е	*Е е*	*Ее*	e	23. Х х	*Х х*	*Хх*	kh
7. Ё ё	*Ё ё*	*Ёё*	(ë) e	24. Ц ц	*Ц ц*	*Цц*	ts
8. Ж ж	*Ж ж*	*Жж*	zh	25. Ч ч	*Ч ч*	*Чч*	ch
9. З з	*З з*	*Зз*	z	26. Ш ш	*Ш ш*	*Шш*	sh
10. И и	*И и*	*Ии*	i	27. Щ щ	*Щ щ*	*Щщ*	shch
11. Й й	*Й й*	*Йй*	(ĭ) i	28. Ъ ъ	*Ъ ъ*	*ъ*	(")
12. К к	*К к*	*Кк*	k	29. Ы ы	*Ы ы*	*ы*	y
13. Л л	*Л л*	*Лл*	l	30. Ь ь	*Ь ь*	*ь*	(')
14. М м	*М м*	*Мм*	m	31. Э э	*Э э*	*Ээ*	(ė) e
15. Н н	*Н н*	*Нн*	n	32. Ю ю	*Ю ю*	*Юю*	yu
16. О о	*О о*	*Оо*	o	33. Я я	*Я я*	*Яя*	ya
17. П п	*П п*	*Пп*	p				

APPENDIX 4

Accents, Apostrophes, Diacritical Marks

(Based on Chemical Abstracts practice)

Accents and diacritical marks are omitted and ignored with the following exceptions:

Germanic ä is replaced by ae
" ö is replaced by oe
" ü is replaced by ue
Scandinavian ø is replaced by oe

The French apostrophe should be replaced by a space in those machine systems which do not include an apostrophe.

APPENDIX 5

Treatment of Surnames with Separately Written Prefixes

(Authority: Anglo-American Cataloging Rules)

A' or A	Write directly: A'Beckett,... A Prato,...
Abu	Write directly: Abu Zarah,...
af	Write after name: Hallstrom, G. J. af
al	Write directly: al-Amrusi, A.
Am	Write directly: Am Thun, A.
Ap	Write directly: Ap Rhys Price, H. E.
D' or d'	Write directly: D'Anvers, K. D'Arienzo, N. Except French: Aubigne, A. d'
Da or da	Write directly: Da Ponte, L. Except Portuguese: Fonseca, M. A. da
De or de	Write directly for English, German, Italian: De Morgan, A. De Boor, H. O. De Amicis, P. M. Write after name for French, Belgian, Spanish, Dutch, Portuguese: Musset, A. de Winter, K. de Figueroa, F. de Avila Pires, C. D. da
De La or de la	Write directly for English, Scandinavian: De La Mare, W. De la Gardie, M. G. Write under La for French: La Fontaine, J. de Write after name for Dutch, Spanish: Faille, J. B. de la Cosa, J. de la
de las	Write after name: Casa, B. de las

Del or del	Write directly for Italian: Del Lungo, I.
	Write after name for Spanish: Rio, A. del
Della	Write directly: Della Volpaia, E.
den	Write after name: Hertog, A. den
Des	Write directly: Des Granges, C.
Di	Write directly: Di Costanzo, Angelo
dos	Write after name: Santos, J. A. dos
Du	Write directly: Du Meril, E. Du Maurier, D. Du Bois-Reymon, E.
El-	Write directly for English: El-Wakil, M. M.
Fitz-	Write directly: Fitz-Geffrey, C.
Hadzi	Write directly when written with hyphen: Hadzi-Vasilevic, J.
	Write after name when no hyphen is used: Dimov, D. hadzi
Ibn	Write directly: Ibn al-Sherif, M.
La	Write directly: La Bruyere, R. La Coür, J. L.
Las	Write directly: Las Heras, M. A.
Le or le	Write directly: Le Sage, A. Le Gallienne, R. Except Dutch: Long, I. le
Li	Write directly: Li Greci, G.
Lo	Write directly: Lo Savio, N.
pop	Write after name: Dimitrov, E. pop
Pop de	Write directly: Pop de Basesti, G.
Popa	Write directly: Popa-Lisseanu, G.

ten	Write after name for Dutch: Brink, J. ten
	Write directly for German: Ten Bruggencate, P.
ter	Write after name: Braak, M. ter
Van or van	Write directly for English: Van Buren, M.
	Write after name for Dutch or Flemish: Driessche, A. van
van den	Write after name: Wijngaert, F. van den
van der	Write after name: Aa, P. van der
van't	Write after name: Hoff, J. van't
Ver	Write directly: Ver Boven, D.
Vom	Write directly: Vom Ende, E.
Von	Write directly in English: Von Gergen, W.
	Write after name in German and Scandinavian: Goethe, W. von Linne, C. von
von der	Write after name: Hagen J. von der
von Le	Write under Le: Le Fort, G. von
z	Write after name: Zerotina, K. z.
Zum	Write directly: Zum Busch, J. P.
Zur	Write directly: Zur Linde, O.

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INDEX

Abbreviations App-1
  availability 10.3
  city names 2.6.b.
  company names 2.4.1.
  corporate author 2.4.1.
  country names 2.6.b.
  cross references 2.7.e.
  filing 14.7.
  first word 2.4.h.
  physical format 10.3.
  report 9.9.
  report numbers
    descriptive words 9.8.
    parts 9.6.
    Roman numerals 9.6.a.
  state names 2.4.m.
    corporate author 2.4.c.
  USSR 2.6.b.

Academies
  foreign 2.6.h.
  institutes and sections 2.6.i.

Accents App-4

Accession number 1.

Acronyms
  cross references 2.7.f.
  effect on selection of corporate elements 2.5.a.
  report numbers 9.3., 9.7.

AEC
  identification of organizations 2.5.b.3.

Air Force
  identification of organizations 2.5.b.3.

Alternate forms of corporate name
  cross references 2.7.c.
  English vs foreign 2.6.a.
  name changes 2.4.j.
  Technische Hochschule 2.6.f.
  universities 2.6.e.

American
  use as proper name 2.5.a.

Ampersand 9.5.

Anglo-American Cataloging Rules App-5

Apostrophe
  French App-4
  Russian App-3

Army
  identification of organizations 2.5.b.3.

Authors
  corporate 2.
  personal 5.

Availability 10.

Board on Geographic Names 2.6.c., App-2

Branch post offices 2.4.n.

Bureaus 2.5.b.1.
  identification 2.5.b.3.

Catalog cards
  format 13.

Centers
  personal names 2.5.a.3.

Change of name 2.4.j.
  cross references 2.7.a.

City name
  abbreviation 2.6.b.
  branch post offices 2.4.n.
  foreign 2.6.c.
  omission 2.4.b.
  position 2.4.
  Technische Hochschule 2.6.f.
  universities 2.4.d.
    foreign 2.6.e.

Commercial organizations
  personal names 2.5.a.2.

Committees
  departmental 2.4.e.
  joint 2.4.g.

Company names
  abbreviation 2.4.1.
  independent names 2.5.b.
  personal names 2.5.a.1.
  proper names 2.5.a.
  report series 2.5.c.1.

Complex titles 3.1.

Conference titles 3.6.

Contract number 8.

Corporate author 2.

Country names 2.6.
  abbreviation 2.6.b.
  cross references 2.7.f.
    use App-2
  omission 2.6.b., 2.6.h.

Cross references 2.7.
  abbreviations 2.7.e.
  acronyms 2.7.e.
  alternate forms of corporate
    name 2.7.c.
  corporate authors 2.7.
  country names 2.7.f.
  definition 2.7., 2.7.a.
  foreign to English 2.6.a.
  name changes 2.7.a.
  omitted corporate elements 2.7.d.
  sa 2.7.a.
  see 2.7.
  smaller corporate element 2.7.b.
  x 2.7.
  xx 2.7.a.

Date 6.
  in title 3.5.

Definitions
  accession number 1.1.
  availability 10.1.
  contract number 8.1.
  cross reference 2.7.
  date 6.1.
  descriptive note 4.1.
  grant number 8.1.
  independent corporate name 2.5.b.
  order number 8.1.
  pagination 7.1.
  personal author 5.1.
  proper name 2.5.a.
  report number 9.1.
  sa reference 2.7.a.
  security classification 12.1.
  see reference 2.7.
  subtitle 4.1.
  supplementary note 11.1.
  titles 3.1.
  x reference from 2.7.
  xx reference from 2.7.a.

Department
  committees 2.4.f.
  universities 2.4.e.

Descriptive cataloging elements Fore-
  word

Descriptive note 4.

Diacritical marks App-4
  Russian App-3

Divisions
  AEC 2.5.b.3.
  companies 2.5.b.

Editing
  contract numbers 8.5.
  report numbers 9.3.

Elements of descriptive cata-
  loging Foreword

English vs native language
  foreign headings 2.6.a.

Filing 14.7.

First word of corporate author
  abbreviation 2.4.h.

Foreign
  academies 2.6.h.
    institutes and sections 2.6.i.
  city names 2.6.c.
  corporate authors 2.6.
    language 2.6.a.
  institutes 2.6.j.
    of technology 2.6.f.
  state names App-2
  technical high schools 2.6.f.
  universities 2.6.d., 2.6.g.
    place name 2.6.e.

Format
  availability 10.3.
  catalog cards 13.
  contract numbers 8.3.
  physical 10.3.
  report numbers
    acronyms 9.3., 9.7.
    ampersand 9.5.
    descriptive phrases 9.10.
    descriptive words 9.8.
    parts 9.6.
    short vs long form 9.2.
    spaces 9.3.

Foundations
  personal names 2.5.a.2.

Geographic names
  Board on 2.6.c., App-2
  branch post office 2.4.n.
  city
    abbreviation 2.6.b.
    foreign 2.6.c.
    omission 2.4.b.
    position 2.4.
  country 2.6.
    abbreviation 2.6.b.
    cross reference 2.7.f.
    omission 2.6.b., 2.6.h.
    use App-2

Geographic names (cont'd.)
  county (foreign) App-2
  political subdivision App-2
  proper name 2.5.a.
  province App-2
  shire App-2
  state
    abbreviation 2.4.m.
      within corporate author 2.4.c.
    foreign App-2
    omission 2.4.b.
    position 2.4.
  Technische Hochschule 2.6.f.
  university 2.4.d.
    foreign 2.6.e.

Government headings
  number of corporate elements 2.5.b.1.
  report series 2.5.b.2.
  U. S. ... 2.4.a.

Grants
  definition 8.1.
  format 8.3.

Hospitals
  personal names 2.5.a.3.

Identification of organizations 2.5.b.

Independent corporate names
  definition 2.5.b.
  identification 2.5.b.3.
  number of elements 2.5.b.

Index entries 14.
  accession number 14.1.
  contract number 14.5.
  corporate author 14.2.
  filing 14.7.
  personal author 14.4.
  report number 14.6.
  title 14.3.

Initials in corporate heading
  personal names 2.5.a.1.
  U. S. 2.4.a.

Institutes
  foreign 2.6.j.
  foreign academies 2.6.i.
  personal names 2.5.a.3.
  technology (foreign) 2.6.i.

Joint committees 2.4.g.

Joint corporate authorship 2.4.b., 11.2.

Journal citations 11.4.

Labeling for identification 2.5.b.3.

Laboratories
  personal names 2.5.a.3.

Language
  diacritical marks App-4
  English vs native language 2.6.a.
  foreign headings 2.6.a.
  Russian transliteration App-3

Limited availability 10.2.

Meeting titles 3.6.

Military installations
  identification of organization 2.5.b.3.
  location 2.4.o.

Name changes 2.4.j.
  cross references 2.7.a.

National
  use as proper name 2.5.a.

Navy
  Bureaus 2.5.b.1.
  identification of organization 2.5.b.3.

Non-commercial organizations
  personal names 2.5.a.3.

Number of corporate elements 2.3.a.
  government 2.5.b.1.
  independent names 2.5.b.
  report series
    one element 2.5.b.2.
    two elements 2.5.c.2.

Numbers
  accession 1.
  contract 8.3.
  grant 8.3.
  order 8.3.
  project 8.5.
  report 9.
  task 8.5.

Omission of
  city names 2.4.b.
  corporate elements 2.3.a., 2.4.
    cross references 2.7.d.
      from larger 2.7.b.
    government headings 2.5.b.1.
      report series 2.5.b.2.
    independent names 2.5.b.
    joint authorship 2.4.k.
    larger two must be used 2.5.c.2.
  country names 2.6.b., 2.6.h.
  personal names
    in Russian institutes 2.6.i.
    in Technische Hochschule 2.6.f.
  state names 2.4.b.
  U. S. 2.4.a.

Order numbers
  definition 8.1.
  format 8.3.

Pagination 7.

Personal author 5.

Personal names in corporate authors 2.5.a.
  commercial organizations 2.5.a.2.
  initials 2.5.a.1.
  non-commercial organizations 2.5.a.3.
  Russian institutes 2.6.i.
  Technische Hochschule 2.6.f.

Physical format
  abbreviations 10.3.

Place names
  Technische Hochschule 2.6.f.
  universities 2.6.e.

Political subdivisions App-2

Position of
  city names 2.3.b.
  country names 2.6.
  state names 2.3.b.

Post Offices 2.4.n.
  Directory 2.4.m.

Projects
  name 8.6.
  number 8.6.
  title 3.1.

Proper names in corporate authors 2.5.a.
  definition 2.5.a.
  independent 2.5.b.
  joint authorship 2.4.k.
  Technische Hochschule 2.6.f.
  universities (foreign) 2.6.e.

Provinces App-2

Publication
  date 6.
  information 11.4.

Punctuation
  report number 9.4.
  title 3.4.

Quotation mark
  Russian App-3

References see Cross references

Report number 9.

Report series
  corporate author 2.5.c.
    company names 2.5.c.1.
    government agencies 2.5.b.2.
    joint authorship 2.4.k.
    selection of elements 2.5.c.
  numbers 9.

Roman numerals
  report numbers 9.6.a.

Russian language
  re-transliteration 5.6.
  transliteration App-3

sa references 2.7.a.

Security classification 12.

see reference from
  abbreviation 2.7.e.
  acronym 2.7.e.
  alternate form of corporate nam 2.7.c.
  country name 2.7.f.
  foreign name 2.6.a.
  omitted corporate element 2.7.
  smaller corporate element 2.7.

see also references 2.7.a.

Selection
  corporate author 2.3.
  date 6.2., 6.3.
  personal author 5.3
  title 3.2., 3.3.

Series titles 3.1.

INDEX

Services 2.5.b.1.

Shires App-2

Short form of name 2.4.1.

Simple titles 3.1.

Specific titles 3.1.

State names
  abbreviation 2.4.m.
    within corporate heading 2.4.c.
  foreign App-2
  omission 2.4.b.
  position 2.3.b.
  universities 2.4.d.

Substations (Post Office) 2.4.n.

Subtitle 4.

Supplementary note 11.

Surname with prefix 5.7.
  foreign 5.7.a., App-5

Symposium titles 3.6.

Task numbers 8.6.

Technische Hochschule 2.6.f.

Title 3.

Translators 11.3.
  omission 5.4.

Transliteration 5.6.
  Russian App-3

Umlaut App-4

United States
  omission 2.4.a.

Universities
  city names 2.4.d.
  departments 2.4.e.
  foreign 2.6.d., 2.6.g.
  personal names 2.5.a.3.
  place name vs proper name 2.6.e.
  proper name in subordinate
    element 2.5.a.
  proper name vs place name 2.6.e.
  report series 2.5.c.[illegible].
  selection of elements 2.5.c.1.
  short form 2.4.i.
  state names 2.4.d

x reference from 2.7.

xx reference from 2.7.a.

ZIP codes 2.4.n., 2.4.o.

Introduction to Report Series Codes

Ten years have elapsed since the first edition to this *Dictionary* was published. Reports are still with us, more numerous than ever, and report numbers have proliferated accordingly. This second edition, begun in 1966, has been delayed in part because of the astounding number of codes blossoming each year. All the problems referred to in the introduction to the first edition remain, and new ones have been added. Nevertheless, there are now developments on the horizon that promise improvements.

Compilation of this second edition has brought home to us the essentiality of the report as a means of communication for scholars and engineers. Its beginnings, described later in the history of reports, can be explained by topical events; its continued use can only be ascribed to a need for such a means of communication among the scholarly community. Twenty-five years seems a reasonable proving period. The technical report should now be accorded full recognition as an established form of technical literature, and should be granted the rights therefrom by those handling that literature.

At the time of the publication of the first edition of this *Dictionary*, estimates of the number of reports issued annually varied from 50,000 to 150,000. Since then guesses have ranged as high as 500,000, but no reliable figure has been ascertained. Certainly the number of issuers of reports has more than doubled as witness this new edition. Furthermore the number of issuers of reports outside the United States has greatly multiplied. Their codes appear frequently in this *Dictionary*. The extension of the report to fields apart from science and technology is also demonstrated here. The social sciences (especially education, housing, urban renewal, and conservation) have begun to use the report as a primary means of communication. Their entry into the report publication field has introduced scores of new report codes.

Along with this proliferation of reports and their codes has come an increased acceptance of them as a respected means of communication. The government abstracting and indexing journals have continued and expanded. *Government Reports Announcements* and its index has evolved from earlier forms, to present to the information and scientific communities a collected announcement and index of the report literature. The earlier journals, *Nuclear Science Abstracts*, *Scientific and Technical Aerospace Reports (STAR)* and the *Technical Abstract Bulletin (TAB)* continue to provide information about reports to those interested in their subject fields. But, representing a major change in the attitude toward reports, many standard abstracting and indexing services are now including them in their coverage. References to reports can be found in almost all the scholarly services. Neglect by them can be ascribed more often to lack of knowledge of the reports than to discrimination against their form of issuance.

With this general acceptance has come a freedom on the part of authors to refer to reports as such in their publications. The "private communication" as a mask for reports is almost dead, and librarians are now presented with both the challenge of tracking down admittedly obscure references to reports and the hope of dealing with a reference that promises something more than total defeat.

Obviously, this greater acceptance of reports has brought solid advantages to the information community. Information about them is far more accessible than formerly. Also, awareness of the need for stricter monitoring of their bibliographic control is growing. Beginning in the middle 1960s the Committee on Scientific and Technical Information (COSATI) of the Federal Council on Science and Technology began to concern itself with the report literature. One of its primary assignments has been to bring the various U.S. government agencies into harmony in their publication practices. In that role it has done much to unify corporate author headings and standardize descriptive cataloging practices, but has so far extended little effort to report numbers. Two COSATI publications *(1, 2)* have dealt with the general problem, but have not offered specific solutions for it. Nevertheless the very existence of COSATI and its concern with reports has led us to such coordination in their handling as the "Government-wide Index . . . to Federal Research and Development Reports" and its successors.

Another development that holds the greatest hope for organization is the interest of the American National Standards Institute in the technical report literature. The ANSI Z-39 Committee for Library Work, Documentation and Related Publishing Practices has two subcommittees working on questions relating to

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technical reports. One has developed a standard for the general format of reports, while the other is concerned specifically with report numbers. The proposals of these subcommittees are discussed later in this Introduction, and hold promise of bringing some logic, restraint and control to the present unmanageable situation.

While recognition of reports is essential to their eventual acceptance and consequent bibliographic control, it has brought with it a proliferation of the problems already existing—more reports, more report series, more untraceable references. It has also created new problems. A serious one is citations to reports, made in all good faith, but containing irrelevant material. An example involving a report from the Los Alamos Scientific Laboratory appears in a French report as this citation:

E. Storm et al. LA-2237 PHYSICS
AND MATHEMATICS
(TID-4500 13th ed. rev.) Nov. 58

The author's name and the report number are both correct, and little harm is done by the remaining bits of information that identify the subject category and distribution list under which initial distribution was made. But other references, made in equally good faith, include the irrelevant material and drop the pertinent items.

Occasionally the confused references are amusing rather than frustrating. One from prestigious *Chemical Abstracts* in 1971 cites a report as "U.S. Clearinghouse Fed. Sci. Tech. Inform., AD 1971, No. 722696." Again no harm is done because any report user can recognize a 6 digit AD number and is unlikely to be misled into suspecting that it was written in 1971 BC.

Purpose of this Dictionary

Report series codes are arbitrarily selected letters and/or numbers used to indicate relationships among individual reports. When combined with other letters and/or numbers specific to those individual reports, they form designators that may identify the reports. They are a device aimed at facilitating report control, both physical and bibliographic.

The development of report codes has followed closely on that of the reports themselves. Through the years codes have become so numerous as to be almost meaningless. Conceived as a shortcut in report reference, they are now often a handicap.

This *Dictionary* is intended as an aid in overcoming that handicap. It attempts to identify or provide an association for most of the codes that have been applied to reports. This introduction endeavors to supply enough background information about the assignment and make-up of report codes to enable the user of the *Dictionary* to interpret these codes and others he may encounter.

Brief History of Report Series Codes

Although reports have been known for many years, their development as a major means of communication dates back only to World War II. The Office of Scientific Research and Development (OSRD) is generally credited with responsibility for their growth. Under the OSRD, government-sponsored research attained the shape it has had ever since. Its outstanding features were decentralization of scientific effort through research contracts, impersonality deriving from the advent of research teams, and problems of security control. Unpublished reports were the most suitable means of recording and disseminating the results of this research.

Another wartime development that produced large numbers of reports was the work of the allied teams that investigated enemy scientific and technical research. They captured many thousands of German and Japanese scientific documents and created thousands of others with reports on their findings and interviews with enemy scientists. The captured documents and the Field Intelligency Agency, Technical (FIAT), British Intelligence Objectives Subcommittee (BIOS), Combined Intelligence Objectives Subcommittee (CIOS), Joint Intelligence Objectives Agency (JIOA) and the Army European Theater of Operations, ALSOS Mission (ALSOS) reports were measured in tons rather than numbers.

Postwar science and technology continued in the pattern of the OSRD. The Atomic Energy Commission (AEC), created by the Atomic Energy Act of 1946, operated its laboratories and promoted nuclear research through contracts. In the military departments there was a tremendous expansion of research. Expenditures for research and development had approximately doubled during the war, and in the decade following they doubled again. During this time the percentage of research money spent by agencies of the federal government increased approximately ten times. By 1950 results of that government-sponsored research were being published in reports at the rate of 75,000 to 100,000 a year.

Obviously there was great need for bibliographic identification and control of these reports. Probably the first attempt was made by the Office of Scientific Research and Development, which adopted a simple numerical series for identifying its reports. Between one-quarter and one-third of its contractors' reports were so numbered, and as Mortimer Taube commented in 1948, "It has been demonstrated over and over again that of all reports issued by OSRD and its contractors, those reports bearing OSRD numbers may be the most conveniently cited and controlled bibliographically." *(3)*

After the disbanding of OSRD, there was no longer a central agency to control or keep track of research reports. In specific areas new agencies were created whose primary mission was the organization and dissemination of reports. An Executive Order in 1945 established the Publication Board, later known as the Office of Technical Services (OTS), for the purpose of collecting and making available unclassified and declassified reports on war time and postwar research sponsored by the federal government and cooperating foreign governments or captured from enemy countries. The Atomic Energy Commission established a Technical Information Service (TIS), later named the Office of Technical Information (OTI), Division of Technical Information Extension (DTIE), and lastly the Technical Information Center (TIC), which was a continuation and expansion of the central indexing service that the University of Chicago's Metallurgical Laboratory had been providing for the Manhattan District since 1942. Its responsibilities were "the dissemination of scientific and technical information relating to atomic energy..." as called for by the Atomic Energy Act of 1946. In 1946/47 the Office of Naval Research (ONR) entered into a contract with the Library of Congress for the establishment of a Science and Technology Project (later known as the Navy Research Section and the Technical Information Division) for servicing technical reports of interest to ONR contractors. In 1948, the Central Air Documents Office (CADO) evolved out of the earlier Air Documents Research Center and Air Documents Division, with the responsibility for organizing all air documents for use by military organizations and their contractors.

These agencies all followed the OSRD example and sought to achieve bibliographic control over the reports in their domains by some sort of report numbering system. Their examples have in turn influenced the agencies they serve, including both originators and users of reports, and report numbers have come to be accepted as the principal device for report control.

Report numbers offer many advantages for bibliographic control. They have simplicity and brevity. They permit open references to security-classified material. When properly used, they provide positive identification of material, and depending on their make-up, may indicate source, date, subject or availability.

Several approaches have been used in the assignment of report numbers. There are simple publication codes with numbers assigned by originating or controlling agencies. These may include a serial number preceded by an indication of the type of publication involved, e.g., Technical Report No. 1, or TR-1, or a serial number preceded by a code for the issuing agency, e.g., LA-2000. Sometimes the serial number is replaced by date of issuance, e.g., ACR, May 1942.

There are accession and distribution codes assigned by recipients of reports. When assigned by individual agencies, they have meaning only within those agencies. When assigned by distribution centers, their meaning resembles publication codes. Many of the best known series have been of this type, e.g.,

PB-	Office of Technical Services
ATI-	Central Air Documents Office
AD-	Defense Documentation Center
U-, R-, C-, S-	Library of Congress, Technical Information Division (*see* Ref. 20)
NP-	Atomic Energy Commission, Technical Information Center
N(YEAR)-	National Aeronautics and Space Administration
X(YEAR)-	National Aeronautics and Space Administration

Although these accession codes are well known and internationally advertised through the report abstracting journals, they still add to the complexities of handling reports. Some feeling for these complexities can be gained from the article by Nancy Boylan *(4)*.

More sophisticated than the simple numerical publication and accession codes are those that reflect the bibliographic description of reports. These codes may include indications of the originating agency, the contract or project under which the work was performed, the type of report, the date of issuance and may or may not contain a serial number, e.g., NACA MR A4L12. It is this type of report code that gave rise to the term "short title" as a synonym for report number.

Finally there are report codes that reflect the subject matter of reports, e.g., RL-25.2.34. These are a natural derivation from traditional library classification schemes and may also be an extension of publication codes, which include symbols for organizational subdivisions of the originating agencies.

Report numbers are put to many different uses, and these uses have influenced the make-up of the codes. When the numbers are used for purposes of property or security control, there is a requirement that they give unique identification of the reports, but only within the property or security control system. There is no advantage to having control numbers indicate anything about the reports or their issuing agencies. When the numbers are used as filing designations, there may be a requirement that the numbers begin with an indication of the originating agency so that the reports will be grouped in the files by source. When the numbers are used in bibliographic references, there is the requirement that they give unique identification, together with the desirability of having the codes indicate the source and availability of the reports and of having them in standard, easily interpreted forms.

One evidence of the increasing acceptance of reports is the role ascribed to them in recent library publications. The "Standard for Descriptive Cataloging of Government Scientific and Technical Reports" (Rev. No. 1) issued by the Defense Documentation Center in

October 1966 specifies that choice of corporate author should follow the level reflected mnemonically in the report series code *(5)*.

Nancy Boylan *(6)*, in her article, "Technical Reports," that appeared in *RQ* in the fall of 1970 stressed the value of understanding report numbers for librarians engaged in the detective work of reference librarianship. She mentions the first edition of this *Dictionary* as a valuable aid to that detective work.

Through the years since report numbers originated, many problems have arisen in connection with them. These problems were probably inevitable. In addition to the various possible approaches to their assignment and the different uses for which they were intended, there was a lack of precedent in handling them and a lack of understanding about their limitations. Hundreds of agencies were involved in their assignment and use; thousands of different codes in different forms sprang up. There was no way to control them. There was, and is, no way to assess their reliability. Some codes are well-known and indicate the sources of the reports, while others mean nothing. Yet all have been used indiscriminately for reference and control.

As early as 1947, when report numbers were still in their infancy, there was recognition of the problems they could pose. A Conference on the Bibliographic Control of Government Scientific and Technical Reports, held at the Library of Congress in September 1947, determined that the lack of standardization of report numbers detracted from their usefulness and recommended that a committee draw up a proposal for improvement *(7)*. The next year, Mortimer Taube *(8)* proposed that, "What is required is the promulgation by some organization having the requisite authority of a scheme through which every scientific and technical report prepared and issued under a research contract with any Federal agency would bear a symbol which would identify uniquely each report and relate it systematically to all other reports."

In 1949 the Special Committee on Technical Information of the Research and Development Board formed an Ad Hoc Panel on Project Identification Numbering Systems to look into the problem. The Panel was unable to recommend a uniform numbering system but did draw up a list of requirements for satisfactory identification numbers. These included identification of the cognizant government agency, a descriptive classification block and a serial block *(9)*.

By 1950 the situation had become serious enough so that the Central Air Documents Office (CADO) undertook a survey of report numbering systems then in use. The results of that study were issued in June 1950 in a CADO report which listed several hundred different numbering systems *(10)*. This preliminary survey was apparently never followed by a final survey or by an official statement of CADO's stand on report numbers, but it did lead to an article by Major P. K. Sturm in CADO's *Technical Data Digest* *(11)* in which he pleaded for a standard system of report numbers in which each number could consist of a prefix establishing the source of the report, a series number designating the series or contract number and the serial number of the report, and a suffix giving additional information such as the type of report, its security classification and its special distribution limitations. This article represents one of the few attempts to specify the makeup of report numbers.

Subsequent to the CADO survey no attempts were made to straighten out the confusion of report numbers. The informal g.s.i.s. program (the "group for standardization of information services") made up of representatives of the AEC's Technical Information Service, the Library of Congress' Navy Research Section, the Central Air Documents Office and the National Advisory Committee for Aeronautics' Division of Research Information, attempted to standardize catalog card format, subject headings and corporate author entries but did not concern itself with report numbering systems. At the Institute on the Administration and Use of Technical Research Reports, sponsored by the Science-Technology Division of the Special Libraries Association in 1952, the problem of report numbers was discussed by only one speaker *(12)* and at the Workshop on the Production and Use of Technical Reports, held at the Catholic University of America in 1953, it was not considered at all. Indeed, during the remainder of the 1950s there was only an unhappy resignation to the confused status quo.

In the 1960s that situation changed. Resignation became revulsion and efforts began to be made to find a way of controlling report numbers. The publication of the first edition of this *Dictionary* demonstrated the seriousness of the problem. Its effect was heightened by an article entitled "Report Number Chaos" appearing in *Special Libraries (13)*.

Shortly after publication of the *Dictionary* a report was issued by Herner and Company that gave the results of their findings from research undertaken under contract to the National Science Foundation *(14)*. The purpose of that contract was announced by NSF as the study of categories and code designations of United States government technical reports aimed at analyzing the various categories and code designations assigned to government reports by federal agencies and their contractors, and determining the need for and practicability of developing and adopting a coordinated government-wide system of improved report code designations *(15)*.

Unfortunately the Herner Company found the problem so large that they elected to ignore the portions of report codes acronymic for the issuing bodies, and concentrated instead on those designating the functions of reports. In the introduction to the report they state that useful information was obtained from 160 organizations, but that the basic corps of material was supplied by 71 organizations and pertained to 245 different report series. Even in so limited a sampling they found so little overlapping of practice from one agency's series to another as to render it insignificant.

In their conclusions about the feasibility of a government-wide controlled system of report numbers they cite several conflicting influences. On the one hand they refer to a steady trend toward the simplification of report numbers and an apparent interest in "order, predictability, mutuality, and continuity" *(16)*, but on the other they quote responses to their questionnaire that show feelings that reports and their designations are the private business of each organization, that local experience is reflected in the series and should be regarded as valuable, that reports are of interest to small circles of users who know and understand the idiosyncracies of the present arrangements, and that administrative controls would make standardization unfeasible.

Despite the negative results of the Herner study, the 1960s showed a series of separate efforts to bring greater appreciation to reports, and through education as well as standards, to provide some measure of bibliographical control over them. Workshops about reports were held by two Chapters of the Special Libraries Association, one by the Rio Grande Chapter in November 1965, and one by the New Jersey Chapter in April 1967. Handbooks on special librarianship began to give more attention to the report literature, and mentioned specifically the problems of dealing with report numbers. Articles about reports appeared in journals dedicated to many different phases of librarianship published in England as well as in the United States. An Italian report issued in 1969 goes so far as to propose international control over report codes and series *(17)*.

In the United States the most definite steps were taken by the Committee on Scientific and Technical Information of the Federal Council for Science and Technology. In 1965 they issued a three volume report entitled "Recommendations for National Document Handling Systems in Science and Technology" that emphasizes the general importance of the report literature *(18)*. This was reinforced the following year by a survey report on "Progress of the United States Government in Scientific and Technical Communication" *(19)*. In October 1966 COSATI issued its "Standard for Descriptive Cataloging of Government Scientific and Technical Reports" that includes precise instructions for ways of citing report numbers, as well as discussing their importance in selecting other descriptive cataloging elements *(20)*. COSATI's "Guidelines to Format Standards for Scientific and Technical Reports Prepared by or for the Federal Government" specifies that "each report shall carry a unique alphanumeric designation" and provides options for a designation provided by the sponsoring agency, one established by the performing organization, or one derived from contract or grant number *(21)*. COSATI also obtained agreement from the major report distribution and indexing agencies to honor one another's report numbers rather than proliferating the numbers applied to each report.

There is evidence that COSATI has given some consideration to the possibilities of national or international control over report series. A report issued in December 1968 by its Task Group on the Role of the Technical Report *(22)* and later revised and published in book form as a portion of "Scientific and Technological Communication" by Sidney Passman contains a reference to a proposal by Dr. C. Sherwin for "a national (and then an international) standard for reporting current efforts [of report identifier control] which would clarify this matter (viz. a Government-wide Form '1498' system." *(23)* His proposal has apparently never been issued by COSATI.

During the 1970s interest in reports and their designators has increased still more. A major tool for untangling report numbers appeared in 1972 with the publication of the *Directory of Engineering Document Sources (24)*. This directory covers approximately 3,600 document identifiers or "initialisms" for "technical/management specifications, standards, reports and related publications" in a broad interpretation of the engineering field. Although it includes only one-sixth the number of entries in this *Dictionary*, it does give additional information about the items covered, such as the indexes in which the document series are covered and the sources from which they are available. The directory also lists government report series arranged by the government branch or department and an organizational index that shows levels and relationships of government bodies. When used in conjunction with this *Dictionary* it should be a helpful reference tool, especially if current plans for making annual revisions are followed.

For the future a promising development is the interest of the American National Standards Institute in technical reports and their identifiers. ANSI Z-39 Committee on Library Work, Documentation and Related Publishing Practices Subcommittee 24 has been working for several years on an American National Standard for Scientific and Technical Reports: Format and Production. The current draft of that standard requires that an identifying report number be assigned to each separately bound document and be shown on all copies.

Another Z-39 subcommittee has been working for the past year on another national standard devoted solely to report numbers. The criteria on which it has proceeded are that every report should have a unique identifying number, that the numbers should be as brief as possible but should designate the issuing organization and date of publication as well as serial number, and that they should be adapted to both machine and manual document systems. Some thought has been given to ways in which the system could later be expanded for international use. The success of achieving unique report identifiers according to the proposed standard is predicated on the designation of a central authority responsible for registering report codes, providing information about assignments, and promoting the use of the standard.

Assignment of Report Designators

The assignment of report designators is indulged in by all who handle reports. Because of the lack of standardization for report designators and the multiple uses to which they may be put, every agency dealing with reports finds at times that it must create a designator or modify the one appearing on the report. Every such creation and modification adds to the likelihood that a subsequent user of the report will be misled by the numbers appearing on it. It is therefore important to know how, why and by whom report designators may be assigned and to recognize the characteristics and limitations of the different types.

The agency in the best position to assign report designators is the one originating or issuing the reports. Designators assigned at the point of origin enjoy the advantage of appearing on every copy of the report, of being accurate (usually), and of being known to the originating and to all distributing agencies. When they contain a designation of the source, they represent the ideal in report designators. Examples of such ideal codes are those applied to formal reports issued by the major contractors of the AEC. The codes are controlled by the AEC, they are brief, they are few in number, and they identify the formal reports completely. Examples of these codes are

ANL- ORNL-
IS- UCRL-

The difficulties with designators assigned by originating agencies arise when the designators 1) attempt to cover additional information about the report origin, 2) contain codes for organizational subdivisions instead of the main agency, or 3) cover only the type of report. Examples of troubles arising from these practices are

1. Formal reports issued by Goodyear Atomic Corporation carry the code GAT-. Those issued by the divisions have an additional code such as GAT-L- for the Laboratory Division and GAT-DR- for the Engineering Development Division. When those divisions combined and were renamed the Technical Division, a GAT-T- series was created that continues the numbering of the GAT-L- series.

2. Johns Hopkins University reports generally carry the code JHU-. Those of its Solid Propellant Information Agency are designated SPIA-. Although this agency is well known, some recipients of its reports still prefer to prefix JHU- to the SPIA-.

3. The internal technical memoranda of the Naval Torpedo Station, Newport, R.I., carry the series code ITM-. Because this is completely ambiguous, most recipients modify it with a prefix to stand for the Naval Torpedo Station, and the prefixes may vary widely.

Still other difficulties arise when correspondence serials, log numbers, central file or other internal designations are applied to reports by originating agencies. When different correspondence serials are used by each subdivision of an agency, their application to reports can lead to an unexpected multiplicity of report codes. For example, the Los Alamos Scientific Laboratory has officially used only two codes for its reports, LA- and LAMS-, yet over 30 correspondence serials were found listed as report series in the sources used for assembling this *Dictionary*. In contrast to this, there is the complexity of numbers that occurs when the same prefix is used for correspondence as for reports. The General Electric Company's Hanford Atomic Products Operation exemplified this difficulty with its multidigit HW-designators. When file or log numbers are added to reports in addition to the formal report numbers, the result is only further confusion. Reports of Edgerton, Germeshausen & Grier, which carry both report numbers and EG&G Out- numbers, are examples.

After the originating agency, those next best qualified to assign report designators are the contracting or sponsoring agencies. These have cognizance of the work being done and usually set the reporting requirements. Their assignment of report designators is generally done in advance so that, as with the designators of originating agencies, report numbers may appear on the reports when they are issued. In addition their codes enjoy the advantage of being widely known and are frequently more easily recognized than those of small contractors.

Contracting agencies employ several methods of assigning numbers to the reports of their contractors. Some use simple serial systems in which all reports are assigned numbers according to the order of their publication. Reports in the Bumblebee or BB- series of Johns Hopkins University follow this pattern. Others employ subdesignations or suffixes to the series to indicate the various contractors. NEPA- reports used this system. For example, NEPA-893-UAC-5 indicates that NEPA report 893 was the fifth report from United Aircraft Corporation. Still others assign blocks of numbers to different contractors. The Manhattan District and its successor, the Atomic Energy Commission, followed this practice with its A-, M- and P- series.

A practice that has gained popularity in recent years is the inclusion of parts of the contract number in the series designation. In the mid-1960s the Atomic Energy Commission adopted that practice for its short term contractors and those that produce few research reports. Their system is to use the approved alphabetic code of the AEC operations office monitoring the contract, followed by the digits of the sequential identification of the contract and a final serial number.

Problems with designators assigned by contracting or sponsoring agencies arise when a project is sponsored by more than one agency, each with its own numbering system. An extreme example of a project with multiple sponsorship is quoted in the *Directory of Engineering Document Sources* as a single document with seven different numbers assigned as follows *(25)*:

DSAM-4130.1	Defense Supply Agency Manual
AR-708-8	Army Regulation
NAVSUP-PUB-5006	Navy Supply Systems Command Publication
AFM-72-5	Air Force Manual
MCO-P4423.17B	Marine Corps Order
GSA-FSS-4130.1	General Services Administration: Federal Supply Service
DASA1-4100.5A	Defense Atomic Support Agency Instruction

Assignment of report designators by recipients is a very different situation. When the recipient is a national supply center for reports there is no problem. The series like PB-, AD- and N(year)- are well known, and the disadvantage of their assignment after issuance is more than offset by their appearance in standard announcement media and their indication of availability. They are described and explained by Nancy Boylan *(26)*. Nevertheless, they create the necessity for a cross-reference from whatever number the originating agency may have applied first, and thus add a complication to the handling of the report. In the early days of report numbers the need for numerical cross-references was not realized. Until the publication of *Correlation Index* by Special Libraries Association in 1953 *(27)*, there was no connection between the PB- numbers by which the Office of Technical Services announced and sold reports and the report numbers given them by their originators. Gradually the importance of numerical cross-references has been accepted, even while the nuisance of creating and maintaining them has been increasingly deplored. The complexities are demonstrated most graphically in another article by Nancy Boylan entitled "Identifying Technical Reports through U.S. Government Research Reports and its Published Indexes" *(28)*.

When the recipient is an individual agency the problem is much more acute. Many organizations have adopted control and filing systems based on simple accession numbers. These have the advantages of permitting ready machine control and of requiring added space only at the end of the file. These accession numbers mean nothing to agencies other than the one assigning them, but their appearance in accession lists invites their further use as bibliographic references. When the accession numbers are prefixed with a code indicating the receiving agency, as in the series DUH- and its successor GEH- applied to incoming reports at Hanford Engineer Works, they at least provide an indication of the agency that can identify the reports. When they lack that code, or carry an ambiguous one, they are a source only of confusion.

Almost as bad, and equally prevalent, are codes assigned by recipients in imitation of the codes used by the authoring agencies, or mnemonic for their names. These have the advantage to the assigners of allying reports with others issued by the same agencies, but the hazard for all others is that they treacherously resemble designators which have real meaning to the report's originators.

The most common and least offensive application of this technique involves the addition of a prefix designating source to the series designator used by the originator. This may involve simply the addition of JHU- to an SPIA- report, or it may mean the translation "Quarterly Progress Report Number 5" issued by the Analytical Division of the ABC Corporation into ABC-AD-QPR-5. Although synthetic, such designators are usually translatable by the originating agency.

At the other extreme are the designators that consist of an arbitrary number appended to a source code. So dangerous are these that most agencies assigning them insert a symbol between the source code and the arbitrary number to warn everyone that the numbers are bogus. Such warning symbols are the -Q- used by Sandia Corporation, the -LA- used by the Los Alamos Scientific Laboratory, and the -MP- used by the Air Force Special Weapons Center. In use, such report numbers look like: PADUAU-LA-6 which identifies the sixth report received without its own identifying number from the University of Padua by the Los Alamos Scientific Laboratory in New Mexico.

Agencies committed to systems requiring an identification of source as part of report designators are understandably eager for a standard system that would guarantee this information. Their interests run from a set of rules for assigning report designators to a dictionary of preferred report source codes constructed along the lines of union list library symbols. One example of a set of rules for assigning report numbers was given by W. H. Richardson *(29)*; another comparable set of rules was suggested by C. W. Sargent *(30)*. No list of preferred source codes has been published. If the proposed ANSI standard for report numbers is accepted in its current form one may evolve from the registry maintained by the central monitoring organization.

Because the systems used by agencies originating, sponsoring, distributing and receiving reports may differ and may necessitate the assignment of report numbers by each, multiple report designations occur frequently.

Some reports actually have several numbers printed on their covers; others bear one printed number with several others stamped or handwritten; some have inexplicable combinations of letters and numbers decorating all edges. An example encountered by the reference staff at the Los Alamos Scientific Laboratory recently was identified variously as:

AD 607 380
SSL(UC)5-42
IER-64-12
AFOSR 64 1891
N65-13343
SSL-TN-6

These threaten endless confusion to those handling the reports. The only hope of averting it is the creation of numerous cross-references. The resulting numerical files bristle with strange entries, grow at an alarming rate and irritate all who use them.

Components of Report Series Designators

Report designators are assigned by many people and used for many purposes, and have therefore come to include a large miscellany of information. In their compact form, all particulars of report identification, history and use can be packed into the 80 digit limitation of punched cards for computers. This is an invitation to assigners to load the numbers. A listing of the possible components of report designators in detail would resemble a dictionary of acronyms, a chart of possible arrangements of them would be more like a railroad guide. Neither is possible here, but a generalized listing of the more common components of report series designators follows together with three examples of the ridiculous lengths that can be achieved when any great number of components are combined.

1. Designators for originating or contracting agency

A. Symbols for name of agency: Despite continuing pressure for some sort of guide for selection of source codes, there have never been any generally accepted rules for their choice. Ordinarily initials are selected, or if these are too common or too difficult, acronyms are used. Obviously there is considerable opportunity for duplication. For example, PC- appears in this *Dictionary* as a code for:

Pepperdine College
Philco Corporation
Plasmadyne Corporation
Providence College
Psychological Corporation

Another distressing example is the confusion of the primary portion of the code APL- for Johns Hopkins University's Applied Physics Laboratory and the Air Force Aeropropulsion Laboratory. Their codes interfile to the 6th character, as shown in the sequences appearing in this *Dictionary*:

APL-SOR-MPCS-
APL-TDR-(YEAR)-
APL-TG-
APL-TM-
APL-TPR-
APL-TR-(YEAR)-

This type of confusion accounts for the fact that many codes have been added to this edition of the *Dictionary* with all letters spelled out, whereas in the first edition they were grouped under the general designation (LETTER(S)).

B. Symbols for originating agencies may be supplemented or supplanted by indications of contract, project, assignment, account or work order number. Most usual is the addition of the number or a pertinent part of it following the codes for originating agency. Another approach is the addition or substitution of a name or part of a name for the project. For example, the reports of the Meteor Project at the Massachusetts Institute of Technology are commonly referred to as METEOR- reports, MIT METEOR- reports, or MIT-MR- reports.

C. Occasionally, especially in the early days of reports, report designations were replaced or supplemented by the initials of the individuals responsible for the reports. Examples of this occurred at Argonne National Laboratory, where ANL-WHZ- was used for Dr. Zinn's reports, and ANL-HDY- for Dr. Young's. A recent example appears in this designation for a conference paper, CERN/ECFA-66/WG 2/TS-SG4/EE-MP-AJH-1, where the last three groups of letters are the initials of the three authors.

2. Indications of subject classification

Subject classification may be shown by arbitrary symbols either substituting for or augmenting the source codes. There have been numerical codes and alphabetic ones. For example, the Aircraft Laboratory of the Engineering Division at Wright-Patterson Air Force Base employed a numerical code involving three digits for a general research subject and two more for the specific subject. The Radiation Laboratory of the University of California at first based its entire classification system on simple alphabetic abridgements of the subject matter of its research projects and later changed to a duodecimal system representing the same information (*see* Ref. 9). The Metallurgical Laboratory of the University of Chicago employed an alphabetical code system that relied on mnemonic indications of general subject fields. These supplemented, but did not affect, the numerical sequence of the regular series of C- reports (*see* Ref. 10).

3. Designation of form of reports

The most common way of specifying the form of a report is by an alphabetic designation replacing or supplementing the rest of the series code. Many such forms are given in "Ambiguous Alphabetical Codes" (Ref. 2), and are discussed at length in the 1962 Herner report. Other systems frequently employed are suffixes, as with

Sandia Corporation's reports, e.g., SC---(NL) for nomenclature lists; by assignment of blocks of numbers, as with the AEC's Division of Technical Information (*see* Ref. 5); or by a modification of the basic report code, as used to be true of Los Alamos Scientific Laboratory's LA- and LAMS- report series (*see* Ref. 21).

4. Date

Date of writing, date of issuance or date of release is often specified in the report number, either by complete date, by parts of the date or by a date code. The latter practice was employed by the National Advisory Committee for Aeronautics in several of its codes (*see* Ref. 25).

5. Security classification

An indication of classification has often been incorporated into report codes. The most conspicuous use of it was by the Navy Research Section of the Library of Congress, which used the letters U-, R-, C-, and S- as the primary designations for the reports under its cognizance (*see* Ref. 20).

6. Mark showing that the designator was assigned by the recipient

Use of the -Q- by Sandia, the -LA- by Los Alamos and and the -MP- by AFSWC has been discussed in the preceding section.

7. Identifier

The identifier is that portion of a report designation that identifies the report, distinguishing it from all others in the series. Most often it is a serial number or occasionally a serial letter. Sometimes it is the date of issuance of the report. Occasionally it is a very short form of the title, with initial letters for the words of the title and numbers for the date of issuance.

8. Examples of excessively long report numbers, caused by using many of the possible components

AGARD-AC/82-D/4-PT-A SECT 1
(27 characters and spaces)
CERN/ECFA-66/WG2/US-SG2/TR3
(27 characters)
WLAD-BL/RP-FVCOG-KPC-70
(23 characters)

Not only are there all these possible components of report designators, but there are also permutations of them. The ideal situation, a simple prefix, a serial number and possibly a suffix, is subscribed to by most report number assigners, but there is little uniformity as to the substance of the prefix, suffix or even the serial portion. A quick check of CADO's *Preliminary Survey* shows that any one of the various components may serve as the first part of a report designator. For example:

Source code: ISC-69, where ISC- represents Iowa State College.
Subdivisions of source: WD-12064, where WD- stands for Wichita Division of Boeing Airplane Company.
Initials: JRD-18-49R, where JRD- are the initials of J.R. Doe of Phillips Petroleum Company, Research Department, Bartlesville, Oklahoma.
Contract, project or work order: 2070-2, where 2070 is the contract number under the Electronic Subdivision, Engineering Division of the Operations Office at Wright-Patterson Air Force Base; 338-3, where 338 is the laboratory project number under Airborne Instruments Laboratory, Mineola, N.Y.; and 2009-5, where 2009 is the work order number under Aerojet Engineering Corporation, Azusa, California.
Form: E-1000, where E- stands for engineering report under Coles Signal Laboratory, or U-MCREXP-9008, where U- stands for an unsatisfactory report.
Date: 49-1-100, where 49 stands for 1949 under Monsanto Chemical Company, or A-4903-123, where A is the code for January, 49 for 1949, and 93 for the day of the month under Burndy Engineering Company.
Security classification: U-1234, where U- stands for unclassified reports received by the Navy Research Section of the Library of Congress.
Identifier: 123-S, where 123 is the sequence number of a report received by the Menasco Manufacturing Company, Burbank, California.

A similar list of examples could be prepared for components appearing as the last part of designators.

In addition to this bewildering assortment of components arranged in many ways, there is the further complication that some of the components may be ignored for the assignment of serial numbers. For example, in the C- series of reports issued by the Metallurgical Laboratory of the University of Chicago, the second or third letters of the codes were ignored in assignment of the serial number (*see* Ref. 10). In the LA/LAMS- report series of the Los Alamos Scientific Laboratory, the MS- has at times been ignored and at other times treated as indication of a separate series (*see* Ref. 21). Atomic Energy of Canada Ltd. used to maintain one series for its formal reports but inserted a letter for the laboratory of origin between the prefix and the serial number (*see* Ref. 6).

Evolution and Proliferation of Report Series Codes

Naturally, with so many characteristics of report numbers and no control of them, the opportunities for their proliferation are limitless. Many of the changes have been intentional and, however regretted by report users, must be accepted.

Chief among these are the changes in report codes to reflect changes in corporate author. Fox example, when the Manhattan District became the Atomic Energy Commission, its declassified documents were given AECD- numbers instead of MDDC- numbers. After the University of Chicago's Metallurgical Laboratory was named Argonne National Laboratory, its code changed from C- to ANL- but the serial numbers continued. Similarly, when Iowa State College became Iowa State University, its code shifted from ISC- to ISU-.

On the other hand some corporate name changes occur without alteration of the report codes. The University of California's Radiation Laboratory used the code UCRL- through several changes of name including the present Lawrence Berkeley Laboratory and Lawrence Livermore Laboratory.

Occasionally the form of report codes is changed by the originator. An outstanding example is the change of the A.E.R.E.- reports to the simpler AERE-. A.E.R.E. Inf/Bib- reports have become AERE-Bib- reports. More often such changes evolve gradually as references to the report numbers are simplified by recipients. For example, the DEG-INF. SER.- reports are also known as DEGIS- reports (*see* Ref. 39).

Other intentional changes have been perpetrated by the reference tools dealing with reports. For example, the *Directory of Engineering Document Sources* explains in its introduction that "Transcription has been based upon two, often conflicting, criteria: 1) Copying the document identification number directly from the document, and 2) Establishing a coherent format which enables listing by a consistent, left-to-right, character-by-character sequencing system. . . .

"Spaces have been replaced by dashes, particularly between initialisms and ensuing character groupings. Where the original consistently leaves no space throughout the series the original has been followed.

"Periods have been omitted from initialisms and abbreviations; decimal points have been retained within numeric groupings. . . .

"We have thereby attempted to steer a middle course between the indigestible inconsistencies of the originals and the often unrecognizable interpolations necessitated for certain other special applications, such as logistics cataloging" *(31)*.

The machine produced abstracting and indexing journals follow similar rules in order to attain consistency and to adapt to the limited character sets of their printers. All punctuation is usually converted to hyphens, as are spaces.

The COSATI "Standard for Descriptive Cataloging" actually specifies such practices, calling for insertion of hyphens wherever spaces occur, substitution of slashes for ampersands, changes of Roman to Arabic numerals, and abbreviations of standard functional words to single letter designations *(32)*.

Such alterations of report numbers may offer advantages of consistency, but they also detract from the distinctiveness of a number's appearance. In this *Dictionary* the original form of the number has been preserved wherever possible, with variants included when they are strikingly different in appearance.

A very unsatisfactory, and fortunately relatively uncommon, evolution of codes occurs when report series are changed and instructions are issued for the renumbering of all previously issued reports in the series. Of course these instructions are never followed completely, and all that is accomplished is the necessity for an eternity of cross-references. Outstanding examples of such attempts at change are the Chicago Metallurgical Laboratory reports of the C- series, whose second and third letters were frequently changes (*see* Ref. 10), and the University of California's Radiation Laboratory reports, which were renumbered into the RL- series from an assortment of codes (*see* Ref. 9).

Serious as have been the intentional changes in report numbers, they cannot compare with changes that have occurred through careless references or different interpretations of series designations. Most prevalent, and understandable, has been the varied interpretation of report covers and title pages. For example, there is a confidential report bearing the following identification:

> L.O.0510
> (Rev. B)
> Serial No. 15933
> Copy No. – of 105
> ASROC Facility Equipment List
> Prepared for U.S. Naval Ordnance Test Station, Pasadena, Calif. by Minneapolis-Honeywell Regulator Co. 1724 S. Mountain Avenue, Duarte, California
> 8 April 1958

It is conceivable that recipients of this report might in all good faith identify it as:

ASROC-15933
ASROC-L.O. 0510, Rev. B
L.O. 0510 Rev. B
MH-15933
MH-L.O. 0510 Rev. B
MHR-15933
MHR-L.O. 0510 Rev. B
NOTS-15933

NOTS-L.O. 0510 Rev. B
USNOTS-15933
USNOTS-L.O. 0510 Rev. B
MHR-15933-NOTS-58
etc.

For a second example, there is an unclassified report of the (Great Britain) Ministry of Supply, Aeronautical Research Council, Reports and Memoranda, marked:

R. & M. No. 2615
(11,767)
A.R.C. Technical Report

This could be interpreted:

A.R.C. Technical report 11767
ARC-11767
ARC R&M-2615
ARC-TR-11767
R&M 2615
R. & M. No. 2615
etc.

Another source of proliferation in report codes is the abundance of errors appearing in the text and particularly in the indexes of the report abstracting and indexing journals. They seem to arise from faulty keypunching, failure to verify keypunching or to proofread listings, the limitations of optical character recognition devices, and the poor legibility of many computer printouts. These errors have become so numerous in the past few years that the compilation of this *Dictionary* has turned up hundreds of them and has led us to insert a special warning following the Explanatory Notes for the *Dictionary*.

The errors fall into several categories. Here are a few examples, arranged in order of the frequency with which we encountered the categories:

Substitution of the wrong letters

AFERL-	for	AFRRI-
AFRII-SR-		AFRRI-SR-
AFMIC-TR-		AFMTC-TR-
AP-AN-		HP-AN-
ARCRL-TRANS-		AFCRL-TRANS-
CFA-R-		CEA-R-
CONE-		CONF-
NRE-ISD-TN-		WRE-ISD-TN-

Transposition of letters

AFCRL-PRSP-	for	AFCRL-PSRP-
AIFT-TR-		AFIT-TR-
AMFL-TR-		AFML-TR-
AORD-		AROD-
ARML-TR-		AMRL-TR-
DCLS-		DLCS-

Added letters

CISAV-MEMO-	for	ISAV-MEMO-
DOTS-HS-		DOT-HS-
XX-643-		X-643-

Omitted letters

AFDL-TR-	for	AFFDL-TR-
C/PSEL-TS-		C/PLSEL-TS-

One example that demonstrates the prevalence of these errors was encountered in a single quarterly index to *Government Reports Announcements*. Reports in the AFOSR- series were listed there with these variants:

AFOSR-70-	(intended form)
AFOSR-0-	
AF-AFOSR-70-	
AFOSR-AFOSR-70-	
AFCSR-70-	
AFORS-70-	
AFSOR-70-	

The fact that makes these apparently obvious errors so serious is that by machine sorting, such references are spread out in the report number indexes and may elude the unwary user. Because of that danger, we have elected to include in this *Dictionary* those erroneous codes that we have encountered in the standard abstracting and indexing services. We trust that by so doing we will help reference librarians searching for aberrant report numbers.

Obviously, there is need for some control of report numbers. There must be sets of rules for assigning them, dictionaries of preferred source codes and patterns for arranging their components, all aimed at report designations that will be complete, consistent, concise and unique.

We sincerely hope that this second edition of the *Dictionary of Report Series Codes* will help report users cope with the chaotic situation surrounding report numbers until order can be created by the use of standards such as the one being proposed by the American National Standards Institute.

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IDENTIFIER AUTHORITY LIST

The following list contains the most commonly used Identifiers in the ERIC system, in their preferred form, together with their accepted acronym, where applicable. Not all domestic city and state names have been included, however, as this was felt to be unnecessary, given the common agreement that existed on the form of most of these names; including them would have needlessly increased the size of the list.

Some of the Identifiers in this list are not heavily posted, but have been included to demonstrate the proper technique for handling a particular problem, e.g., "Hobson v Hansen". Terms (usually organization names) that threaten to go over the maximum limit of 50 characters have been shortened via the following two techniques, applied in the sequence given:

1. Remove all connectives, e.g., and, for, in, of, the, to. For example, "American Association Advancement Science" has been shortened by this method from 51 to 40 characters.

2. Abbreviate the most commonly abbreviated words, e.g., Association = Assn. For example, "American Assn Health Physical Education Recreation" has been shorted from 65 to 50 characters using both of these methods.

Identifier	Acronym	Class/Category
4 H Clubs		Organization
Adult Education Act		Legislation
Advisory Council on College Chemistry		Organization
Africa		Geog Location
Agency for International Development	AID	Organization
Alabama		Geog Location
Alaska		Geog Location
Albany		Geog Location
① American Assn Health Physical Education Recreation	AAHPER	Organization
① American Association Advancement Science	AAAS	Organization
① American Association Colleges Teacher Education	AACTE	Organization
American College Test	ACT	Test
American College Testing Program	ACT	Organization
American Educational Research Association	AERA	Organization
American Federation of Teachers	AFT	Organization
American Institutes for Research	AIR	Organization
American Telephone and Telegraph Company	ATT	Organization
Ann Arbor		Geog Location
Appalachia		Geog Location
② Army		Organization
Asia		Geog Location
Athens		Geog Location
② Atomic Energy Commission	AEC	Organization
BASIC		Equipment (Programming Language)
Bender Gestalt Test		Test
Berkeley		Geog Location
Biological Sciences Curriculum Study	BSCS	Organization
Bloom (Benjamin S)		Personal Name
④ Blooms Taxonomy of Educational Objectives		Method/Theory
④ Bnai Brith		Organization
British Broadcasting Corporation	BBC	Organization
Brown v Board of Education of Topeka		Legislation
Bureau of Education for the Handicapped	BEH	Organization
Bureau of Indian Affairs	BIA	Organization
California		Geog Location
California Achievement Test	CAT	Test
California Department of Education		Organization
California Test of Mental Maturity		Test
California Test of Personality		Test

NOTE: Explanation of the footnotes appear at the end of the list.

Identifier	Acronym	Class
Cambridge		Geog Location
Canada		Geog Location
Central Midwestern Regional Educational Laboratory	CEMREL	Organization
Chaucer (Geoffrey)		Personal Name
Chemical Education Materials Study		Project
Chicago		Geog Location
China		Geog Location
Chippewas		Tribe
③ Civil Rights Act 1964		Legislation
③ Civil Rights Act 1964 Title IV		Legislation
Classroom Observation Record		Test
College and University Environment Scales	CUES	Test
Colombia		Geog Location
Colorado		Geog Location
Columbia		Geog Location
Columbia University Teachers College		Organization
Committee on Scientific and Technical Information	COSATI	Organization
Community Coordinated Child Care		Project
Comprehensive Elementary Teacher Education Models	CETEM	Method/Theory
② Congress		Organization
② Congress 90th		Organization
Cooperative Extension Service		Organization
Cooperative Project for Educational Development	COPED	Project
Defense Documentation Center	DDC	Organization
Delphi Technique		Method/Theory
Denver		Geog Location
② Department of Defense	DOD	Organization
② Department of Health Education and Welfare	DHEW	Organization
Detroit		Geog Location
DHEW Region VI		Organization
Differential Aptitude Tests	DAT	Test
Distinguished Achievement Awards Entry		Coined Terminology
District of Columbia		Geog Location
East Africa		Geog Location
Eastern Michigan University		Organization
East Lansing		Geog Location
East Germany		Geog Location
Economic Opportunity Act		Legislation
Edison Responsive Environment		Method/Theory
Educational Resources Information Center	ERIC	Organization
Educational Services Incorporated		Organization
Educational System for the Seventies	ES 70	Project
Education Professions Development Act	EPDA	Legislation
Edwards Personal Preference Schedule	EPPS	Test

Identifier	Acronym	Class
③ Elementary Secondary Education Act	ESEA	Legislation
③ Elementary Secondary Education Act Title I	ESEA Title I	Legislation
③ Elementary Secondary Education Act Title III	ESEA Title III	Legislation
Emergency School Assistance Program	ESAP	Project
England		Geog Location
ERIC Clearinghouse on the Disadvantaged		Organization
Far East		Geog Location
① Far West Laboratory for Educational R and D		Organization
Federal Communications Commission	FCC	Organization
Flanders System of Interaction Analysis		Method/Theory
Florida		Geog Location
Florida Agricultural and Mechanical University		Organization
FORTRAN		Equipment
France		Geog Location
Frostig Developmental Test of Visual Perception		Test
General Aptitude Test Battery	GATB	Test
Germany		Geog Location
Great Britain		Geog Location
Great Cities Program		Project
Harlem		Geog Location
Hawaii Department of Education		Organization
Higher Education Act		Legislation
Hobson v Hansen		Legislation
Hopis		Tribe
IBM 360		Equipment
Illinois		Geog Location
Illinois Test of Psycholinguistic Abilities	ITPA	Test
Indiana University		Organization
Individually Prescribed Instruction	IPI	Method/Theory
International Business Machines Corporation	IBM	Organization
Iowa Tests of Basic Skills	ITBS	Test
Israel		Geog Location
Ithaca		Geog Location
Jensen (Arthur R)		Personal Name
② Job Corps		Organization
④ John F Kennedy University		Organization
④ Johnson O Malley Act		Legislation
Kennedy (John F)		Personal Name
Kent State University		Organization
Kibbutzim		Method/Theory
Latin America		Geog Location
Learning Research and Development Center		Organization
Lee Clark Reading Readiness Test		Test
Library Services and Construction Act	LSCA	Legislation
London		Geog Location
Lorge Thorndike Intelligence Test		Test
Los Angeles		Geog Location

Identifier	Acronym	Class
Madison		Geog Location
Mainland China		Geog Location
Manhattan		Geog Location
Manpower Development and Training Act	MDTA	Legislation
Markov Chain Process		Method/Theory
Maryland		Geog Location
Medical Literature Analysis and Retrieval System	MEDLARS	Organization
Menominees		Tribe
Metropolitan Achievement Tests		Test
Metropolitan Readiness Test		Test
Mexico		Geog Location
Michigan		Geog Location
④ Mid Continent Regional Educational Laboratory		Organization
Middle East		Geog Location
Minneapolis		Geog Location
Minnesota		Geog Location
Minnesota Multiphasic Personality Inventory	MMPI	Test
Minnesota Teacher Attitude Inventory	MTAI	Test
Mobilization for Youth	MFY	Project
Modern Language Association	MLA	Organization
MLA Cooperative Foreign Language Tests		Test
Monte Carlo Method		Method/Theory
Montessori Method		Method/Theory
Montgomery County		Geog Location
More Effective Schools		Project
Moscow		Geog Location
National Aeronautics and Space Administration	NASA	Organization
National Assessment of Educational Progress		Project
National Defense Education Act	NDEA	Legislation
National Education Association	NEA	Organization
National Institute of Education	NIE	Organization
National Merit Scholarships		Project
National Science Foundation	NSF	Organization
Navajos		Tribe
② Naval Academy		Organization
② Navy		Organization
Neighborhood Youth Corps	NYC	Organization
New Careers		Project
New England		Geog Location
New Grammar		Coined Terminology
New Social Studies		Coined Terminology
New York		Geog Location
New York City		Geog Location
New York City Board of Education		Organization
New York Education Department		Organization
New York University		Organization
NIE Archives		---

Identifier	Acronym	Class
North Carolina		Geog Location
Oakland		Geog Location
② Office of Economic Opportunity	OEO	Organization
② Office of Education	OE	Organization
Ohio		Geog Location
Ohio State University		Organization
Open University		Organization
① Organisation Economic Cooperation Development	OECD	Organization
Peabody Picture Vocabulary Test	PPVT	Test
② Peace Corps		Organization
Pennsylvania		Geog Location
Philadelphia		Geog Location
Physical Science Study Committee		Organization
Piaget (Jean)		Personal Name
Planning Programming Budgeting System	PPBS	Method/Theory
Plato		Personal Name
Potawatomis		Tribe
Program Evaluation and Review Technique	PERT	Method/Theory
Programmed Logic for Automatic Teaching Operations	PLATO	Equipment
Project ABLE		Project
Project English		Project
Project Follow Through		Project
Project Head Start		Project
Project Talent		Project
Project Upward Bound		Project
Projects to Advance Creativity in Education	PACE	Project
Public Broadcasting System	PBS	Organization
④ Public Law 88 164		Legislation
Putting Research into Educational Practice	PREP	Project
Quinmester Program		Project
Ravens Progressive Matrices		Test
② Reserve Officers Training Corps	ROTC	Organization
Right to Read		Project
Rutgers The State University		Organization
Saint Louis		Geog Location
Santa Monica		Geog Location
Scholastic Aptitude Test	SAT	Test
School and College Ability Test	SCAT	Test
④ Science A Process Approach		Course
Scientific and Technical Information	STINFO	Coined Terminology
Seattle		Geog Location
Selective Dissemination of Information	SDI	Method/Theory
Semantic Differential		Method/Theory
Sequential Tests of Educational Progress	STEP	Test
Sesame Street		Coined Terminology

Identifier	Acronym	Class
Shakespeare (William)		Personal Name
Sioux Tribes		Tribe
Skinner (B F)		Personal Name
SMART		Equipment
Social Science Education Consortium		Organization
South Africa		Geog Location
Southeast Asian Ministers Education Organization	SEAMEO	Organization
Southern United States		Geog Location
Southwest Educational Development Laboratory	SWEDL	Organization
Southwest		Geog Location
Springfield		Geog Location
Stanford		Geog Location
Stanford Achievement Test		Test
Stanford Achievement Test Reading		Test
Stanford Binet Intelligence Scale		Test
Stanford University		Organization
State University College Oswego		Organization
State University of New York	SUNY	Organization
State University of New York Buffalo		Organization
② Supreme Court		Organization
Syracuse		Geog Location
Taiwan		Geog Location
Teacher Corps		Organization
Texas		Geog Location
Thematic Apperception Test	TAT	Test
Tom Sawyer		Book
Torrance Tests of Creative Thinking	TTCT	Test
Training Teacher Trainers	TTT	Project
Twain (Mark)		Personal Name
Ukraine		Geog Location
UNESCO		Organization
Union of Soviet Socialist Republics	USSR	Geog Location
United Arab Republic	UAR	Geog Location
United Kingdom		Geog Location
United Nations		Organization
United Nations Childrens Fund	UNICEF	Organization
United States		Geog Location
University of California		Organization
University of California Los Angeles	UCLA	Organization
University of Sussex		Organization
University Park		Geog Location
Vocational Education Act		Legislation
W K Kellogg Foundation		Organization
Washington		Geog Location
Washington (Oklahoma)		Geog Location
Washington Precollege Test		Test
Watson Glaser Critical Thinking Appraisal		Test
Wechslers Adult Intelligence Scale	WAIS	Test
Wechslers Intelligence Scale for Children	WISC	Test

Identifier	Acronym	Class
West Germany		Geog Location
④ Young Mens Christian Association	YMCA	Organization
Young Womens Christian Association	YWCA	Organization

① Names that have been shortened in order to get them under 50 characters.

② U. S. Government agencies and organizations. Note the uniform dropping of the "U. S." initials in front of such entities.

③ Legislation. Note the dropping of the preposition "of" before the number identifying the year when the legislation was passed.

④ Names from which special characters (e.g., colons, hyphens) have been dropped. Note that the only special characters permitted are parentheses.

APPENDIX G

ERIC DIRECTORY
(ERIC Clearinghouses and Other Network Components)

The exact number of Clearinghouses has fluctuated over time in response to the shifting needs of the educational community. There are currently 16 Clearinghouses. These are listed below, together with full addresses, telephone numbers, and brief scope notes describing the areas they cover.

ERIC Clearinghouse in *Career Education*
Northern Illinois University
College of Education
204 Gabel Hall
DeKalb, Illinois 60115
Telephone: (815) 753-1251

Career education, formal and informal at all levels, encompassing attitudes, self-knowledge, decision-making skills, general and occupational knowledge, and specific vocational and occupational skills; adult and continuing education, formal and informal, relating to occupational, family, leisure, citizen, organizational, and retirement roles; vocational and technical education, including new sub-professional fields, industrial arts, and vocational rehabilitation for the handicapped.

ERIC Clearinghouse on *Counseling and Personnel Services*
University of Michigan
Counseling and Personnel Services Information Center
School of Education Building, Room 2108
Ann Arbor, Michigan 48104
Telephone: (313) 764-9492

Preparation, practice, and supervision of counselors at all educational levels and in all settings; theoretical development of counseling and guidance; use and results of personnel procedures such as testing, interviewing, disseminating, and analyzing such information; group work and case work; nature of pupil, student, and adult characteristics, personnel workers and their relation to career planning, family consultations, and student orientation activities.

ERIC Clearinghouse on the *Disadvantaged*
Columbia University, Teachers College
Information Retrieval Center on the Disadvantaged
Box 40
525 W. 120th Street
New York, New York 10027
Telephone: (212) 678-3780

Effects of disadvantaged experiences and environments, from birth onward; academic, intellectual, and social performance of disadvantaged children and youth from grade 3 through college entrance; programs and practices which provide learning experiences designed to compensate for special problems of disadvantaged; issues, programs, and practices related to economic and ethnic discrimination, segregation, desegregation, and integration in education; issues, programs, and materials related to redressing the curriculum imbalance in the treatment of ethnic minority groups.

ERIC Clearinghouse on *Early Childhood Education*
University of Illinois
College of Education
805 W. Pennsylvania Avenue
Urbana, Illinois 61801
Telephone: (217) 333-1386

Prenatal factors, parental behavior; the physical, psychological, social, educational, and cultural development of children from birth through the primary grades; educational theory, research, and practice related to the development of young children.

ERIC Clearinghouse on *Educational Management*
University of Oregon
Eugene, Oregon 97403
Telephone: (503) 686-5043

Leadership, management, and structure of public and private educational organizations; practice and theory of administration; preservice and inservice preparation of administrators, tasks, and processes of administration; methods and varieties of organization, organizational change, and social context of the organization.

Sites, buildings, and equipment for education; planning, financing, constructing, renovating, equipping, maintaining, operating, insuring, utilizing, and evaluating educational facilities.

ERIC Clearinghouse on *Handicapped and Gifted Children*
Council for Exceptional Children
1920 Association Drive
Reston, Va. 22091
Telephone: (703) 620-3660

Aurally handicapped, visually handicapped, mentally handicapped, physically handicapped, emotionally disturbed, speech handicapped, learning disabilities, and the gifted; behavioral, psychomotor, and communication disorders, administration of special education services; preparation and continuing education of professional and paraprofessional personnel; preschool learning and development of the exceptional; general studies on creativity.

ERIC Clearinghouse on *Higher Education*
George Washington University
One Dupont Circle, Suite 630
Washington, D. C. 20036
Telephone: (202) 296-2597

Various subjects relating to college and university students, college and university conditions and problems, college and university programs. Curricular and instructional problems and programs, faculty, institutional research, Federal programs, professional education (medical, law, etc.), graduate education, university extension programs, teaching-learning, planning, governance, finance, evaluation, interinstitutional arrangements, and management of higher educational institutions.

ERIC Clearinghouse on *Information Resources*
Stanford University
School of Education
Center for Research and Development in Teaching
Stanford, California 94305
Telephone: (415) 493-3345

Management, operation, and use of libraries; the technology to improve their operation and the education, training, and professional activities of librarians and information specialists. Educational techniques involved in microteaching, systems analysis, and programmed instruction employing audiovisual teaching aids and technology, such as television, radio, computers, and films. Technology in society adaptable to education, including cable television, communication satellites, microforms, and public television.

ERIC Clearinghouse for *Junior Colleges*
University of California
Powell Library, Room 96
405 Hilgard Avenue
Los Angeles, California 90024
Telephone: (213) 825-3931

Development, administration, and evaluation of public and private community junior colleges. Junior college students, staff, curricula, programs, libraries, and community services.

ERIC Clearinghouse on *Languages and Linguistics*
Center for Applied Linguistics
1611 North Kent St.
Arlington, Virginia 22209
Telephone: (703) 528-4312

Languages and linguistics. Instructional methodology, psychology of language learning, cultural and intercultural content, application of linguistics, curricular problems and developments, teacher training and qualifications, language sciences, psycho-linguistics, theoretical and applied linguistics, language pedagogy, bilingualism, and commonly and uncommonly taught languages including English for speakers of other languages.

ERIC Clearinghouse for *Reading and Communication Skills*
National Council of Teachers of English
1111 Kenyon Road
Urbana, Illinois 61801
Telephone: (217) 328-3870

Reading, English, and communication skills, preschool through college. Educational research and development in reading, writing, speaking, and listening. Identification, diagnosis, and remediation of reading problems. Speech communication—forensics, mass communication, interpersonal and small group interaction, interpretation, rhetorical and communication theory, instruction development, speech sciences, and theater. Preparation of instructional staff and related personnel in these areas.

All aspects of reading behavior with emphasis on physiology, psychology, sociology, and teaching. Instructional materials, curricula, tests and measurement, preparation of reading teachers and specialists, and methodology at all levels. Role of libraries and other agencies in fostering and guiding reading. Diagnostic and remedial services in school and clinical settings.

ERIC Clearinghouse on *Rural Education and Small Schools*
New Mexico State University
Box 3AP
Las Cruces, New Mexico 88003
Telephone: (505) 646-2623

Education of Indian Americans, Mexican Americans, Spanish Americans, and migratory farm workers and their children; outdoor education; economic, cultural, social, or other factors related to educational programs in rural areas and small schools; disadvantaged of rural and small school populations.

ERIC Clearinghouse on *Science, Mathematics, and Environmental Education*
The Ohio State University
1800 Cannon Drive
400 Lincoln Tower
Columbus, Ohio 43210
Telephone: (614) 422-6717

All levels of science, mathematics, and environmental education; development of curriculum and instructional materials; media applications; impact of interest, intelligence, values, and concept development upon learning; preservice and inservice teacher education and supervision.

ERIC Clearinghouse for *Social Studies/Social Science Education*
855 Broadway
Boulder, Colorado 80302
Telephone: (303) 443-1383

All levels of social studies and social science; all activities relating to teachers; content of disciplines; applications of learning theory, curriculum theory, child development theory, and instructional theory; research and development programs; special needs of student groups; education as a social science; social studies/social science and the community.

ERIC Clearinghouse on *Teacher Education*
American Association of Colleges for Teacher Education
One Dupont Circle, Suite 616
Washington, D. C. 20036
Telephone: (202) 293-7280

School personnel at all levels; all issues from selection through preservice and inservice preparation and training to retirement; curricula; educational theory and philosophy; general education not specifically covered by Educational Management Clearinghouse; Title XI NDEA Institutes not covered by subject specialty in other ERIC Clearinghouses; all aspects of physical education.

ERIC Clearinghouse on *Tests, Measurement, and Evaluation*
Educational Testing Service
Princeton, New Jersey 08540
Telephone: (609) 921-9000 ext. 2182

Tests and other measurement devices; evaluation procedures and techniques; application of tests, measurement, or evaluation in educational projects or programs.

Educational Resources Information Center
(Central ERIC)
National Institute of Education
Washington, D. C. 20208
Telephone: (202) 254-5040

ERIC Processing & Reference Facility
Suite 303
4833 Rugby Avenue
Bethesda, Maryland 20014
Telephone: (301) 656-9723

ERIC Document Reproduction Service
P.O. Box 190
Arlington, Virginia 22210
Telephone (703) 841-1212

Macmillan Information
866 Third Avenue
New York, New York 10022
Telephone: (212) 935-3274

ERIC PROCESSING MANUAL

INDEX

-A-

ABBREVIATIONS, 175, 204, App. A
ABSTRACTS/ABSTRACTING, 193-241
    Abbreviations, 204-205
    Abstractor's Initials, 191, 205
    Abstracts (on Resume Form), 190-191
    Authorities, 201-202
    Author's Viewpoint, 200
    Bibliographies, 207
    Content, 199
    Curriculum Guides, 206
    Directories, 207
    Emphases, 199
    Identification of Abstractor, 205
    Indicative, 197-198, 209-210
    Informative, 197-198, 207-208
    Intended Audience, 200
    Intended Use, 200
    Length, 203
    Multiple Authors, 207
    NTIS Abstracts, 205
    Program Descriptions, 206
    Publication Type, 199
    Relationship to Other Works, 200
    Tense, 204
    Tests, 207
    Textbooks, 206
    Voice, 204
ACADEMIC LEVEL (INDEXING), 236-237
ACCESSION NUMBERS
    Clearinghouse Accession Numbers, 149-150
    ED Accession Numbers, 113-114, 149
ACKNOWLEDGMENT TO DOCUMENT CONTRIBUTOR, 53
ACRONYMS, App. A
ACRONYMS (IDENTIFIERS), 294
ACQUISITIONS, 25-76
    Acknowledgment to Document Contributors, 53
    Automatic Distribution, 31, 61-62
    Central ERIC, 42-43
    Clearinghouses, 44-58
    ERIC Facility Acquisition Arrangements, 60-63
    ERIC Facility Acquisitions Summary Report, 73-74

    ERIC Facility, 58-75
    Exchanges, 31, 34
    Form Letters, 37-40
    Methods and Techniques, 29-41
    Purchases (Blanket Orders), 35-36
    Reply Cards, 114, 116, 129
    Tools, 40-42, 45-46
    Types of Arrangements, 30-39
    Unsolicited Receipts, 30
ACQUISITIONS DATA INPUT FORM, 125
ACQUISITIONS DATA REPORT (ADR), 119-126
ACTION CONCEPTS (INDEXING), 239
ADDRESSING, 134
AIM/ARM DOCUMENTS, 172
ANALYTICS, 157, 181-182, 185
ANGLO-AMERICAN CATALOGING RULES, 141, 162
ANNOTATIONS/ANNOTATING, 211-214, 364
    Length, 212
    Format, 212
ASSIGNMENT (OF DOCUMENTS) TO CLEARINGHOUSES, 111-112
AUDIOVISUAL MATERIALS, 186
AUTHORITY OF AUTHOR (SELECTION CRITERIA), 93
AUTHOR(S)
    Authority of Author (Selection Criteria), 93
    Corporate, 166-169
    Multiple, 160-161
    Personal, 158-161
AUTOMATIC DISTRIBUTION, 31, 61-62
AVAILABILITY, 100, 182-186
    Level of Availability, 153-158

-B-

BASIC U. S. GOVERNMENT MICROGRAPHICS STANDARDS AND SPECIFICATIONS, 94
BEST COPY AVAILABLE STAMP, 99-100
BLANKET ORDERS, ACQUISITIONS, 35-36
BLANKET REPRODUCTION RELEASE, 156
BRACKETS, 145, 151, 159, 162
BROAD TERMS (EXCESSIVELY), 254
BROADER TERMS, 272-276, 315-316
BROKEN TYPE, 95

-C-

CAPITALIZATION (DESCRIPTORS), 188
CATALOGING, DESCRIPTIVE, 137-192
CENT SIGN, 183

CENTRAL ERIC, 1, 42-43, 71
CHARACTER SET, 147
CLEARINGHOUSE(S)
    Accession Log Sheet, 133
    Accession Number, 149-150
    Acquisitions, 44-48
    Addresses, 11, App. G
    Background/History, 7
    Document Assignment, 111-112
    Functions, 6-12
    Inter-Clearinghouse Transfers, 129
    Prefixes, 10, 150, 358-359
    Request to Facility for Government Documents, 65
    Scope of Interest, 11-12, 82-86, 230, App. C
CLEARINGHOUSE ACCESSION LOG SHEET, 133, 361
CLEARINGHOUSE ACCESSION NUMBER, 149-150
CODES
    Corporate Author (COSATI), 168
    Dictionary of Report Series Codes, 173, App. E
    Group, 312-313, 364
    Program Area, 151-152
    Publication Type, 177-178
    Report Series Codes, App. E
COINED TERMINOLOGY, 295
COLORED INK, 96
COLORED PAPER, 96
COMPILER ENTRIES, 161
COMPREHENSIVENESS (SELECTION CRITIERIA), 93
CONFERENCE PROCEEDINGS, 165
CONFERENCES (IDENTIFIERS), 295
CONGRESSIONAL DOCUMENTS, 165
CONTRACT NUMBER, 169-170
CONTRACTORS, 13-18
CONTRIBUTION TO KNOWLEDGE (SELECTION CRITERIA), 89-90
COORDINATE INDEXING, 221-224
COPYRIGHT, 56-58, 153-158, 181
    Partial, 157-158
CORE JOURNALS, 355
CORPORATE AUTHOR CODES (COSATI), 168
CORRECTIONS (RESUME FORM), 145
COSATI CATALOGING RULES, App. D
COURSE CATALOG LISTING (IDENTIFIERS), 295
CURRENT INDEX TO JOURNALS IN EDUCATION (CIJE), 16-17, 186, 351-365
CURRICULUM CONCEPTS (INDEXING), 239

DATE OF PUBLICATION, 151
DEFENSE DOCUMENTATION CENTER (DDC), 177
DEFINITIONS (GLOSSARY), App. B
DESCRIPTIVE CATALOGING, 137-192
DESCRIPTOR AND IDENTIFIER USAGE REPORT, 24, 230
DESCRIPTOR COORDINATION PROCEDURE, 304-333
DESCRIPTOR GROUP DISPLAY, 280
DESCRIPTOR JUSTIFICATION FORM (DJF), 307-309
    Transmittal, 332-333
DESCRIPTORS, 187-188
    Authorities, 322-323
    Capitalization, 188
    Definition, 265
    Definition (on DJF), 323-324
    Depth of Indexing, 187, 189
    Length, 308
    Modifying a Term, 324-331
DICTIONARY OF REPORT SERIES CODES, 173
DISCOUNTS, 185
DISSERTATION ABSTRACTS, 88
DISSERTATIONS/THESES, 88-89, 181
DISSERTATIONS/THESES (SELECTION), 88
DOCUMENT EVALUATION FORMS, 84-85
DOCUMENT FORM, 240-241
DOCUMENT LANGUAGE, 181
DOCUMENT QUALITY, 89-93
DOCUMENT REQUESTS, 50-51
DOCUMENT TYPE, 240-241
DUPLICATE CHECKING, 108-109, 117-118

-E-

ED ACCESSION NUMBER, 149
ED NUMBER ASSIGNMENT, 113-114
EDITING, 14
EDITOR ENTRIES, 160
EDRS PRICE, 171-172
EDUCATION-RELATED JOURNALS, 355
EFFECTIVENESS OF PRESENTATION (SELECTION CRITIERIA), 91-92
ERIC CHARACTER SET, 147
ERIC DIRECTORY, App. G
ERIC DOCUMENT REPRODUCTION SERVICE (EDRS), 17-18, 114
    Disposition of Original Documents, 135
    EDRS Price, 171-172
    Hard Copy, 23
    Microfiche, 17-18, 23

ERIC FACILITY ACQUISITIONS ARRANGEMENTS (EFAA), 60-63
ERIC FACILITY ACQUISITIONS SUMMARY REPORT, 73-74
ERIC MASTER SCHEDULE, 135
ERIC NETWORK COMPONENTS, 4
  Central ERIC, 3, 42-43, 71
  Contractors, 13-18
  EDRS, 17-18
  ERIC Processing and Reference Facility, 13-16
  Macmillan Information, 16-17
ERIC PROCESSING AND REFERENCE FACILITY, 13-16
  Acquisitions, 58-75
ERIC PROCESSING MANUAL, iii-v
ERIC PRODUCTS, 19-24
ERIC SYSTEM
  Background/History, 7-8
  CIJE Contractor, 16-18
  Clearinghouses, 6-12
  Components, 3-18
  Contractors, 13-18
  ERIC Document Reproduction Service, 17-18
  ERIC Processing and Reference Facility, 13-16
  Processing Interactions, 5
ERICTAPES, 16, 20
ERICTOOLS, 16, 23-24
ETHNIC GROUPS/TRIBES, 295
EVALUATION *see* SELECTION
EXCHANGES (OF PUBLICATIONS), 31, 34

-F-

FABRICATED TITLE, 162
FAINT TYPE, 95
FALSE DROPS, 224
FOREIGN LANGUAGE DOCUMENTS, 164
FORM OF DOCUMENT, 240-241
  Acquisitions Data Input Form, 125
  Clearinghouse Accession Log Sheet, 133, 361
  Descriptor Justification Form, 309-310
  Document Evaluation Forms, 84-85
  EFF-26, 144
  Journal Article Resume Form, 362-365
  OE Form 6000, 144
  OE Form 6027, 362-363
  PRIORITY Handling Form, 113
  Report Resume Form (EFF-26), 144-148

-G-

GENERIC-SPECIFIC STRUCTURING, 271-276
GEOGRAPHIC LOCATIONS, 296
GLOSSARY, App. B
GOVERNMENT PRINTING OFFICE (GPO), 18, 66, 155
    GPO Style Manual, 201, 205
GPO STYLE MANUAL, 201, 205
GRADE LEVEL (INDEXING), 236-237
GRANT NUMBER, 170
GROUP CODE, 312-313, 364

-H-

HANDLING AND SHIPPING, 101-136
    Addressing, 134
    Clearinghouse Accession Number Log Sheet, 132-133
    In-Process Control, 107-108
    Labeling, 134
    On-Order File, 107
    Packing, 132-134
    Schedule, 135
    Wrapping, 134
HANDWRITTEN DOCUMENTS, 97
HARD COPY, 23
HEARINGS, 165-166
HIERARCHICAL DISPLAY, 279
HIERARCHIES (THESAURUS), 271-276
HOLOGRAPHS, 97
HONORIFICS, 159
HYPHENATION, 145

-I-

IDENTIFIER AUTHORITY LIST, 301-302, App. F
IDENTIFIERS, 188-190, 241-242, 292-303
    Authorities, 303
    Authority List, 301-302, App. F
    Categories, 294-300
    Definition, 266
    Depth of Indexing, 189
    Length, 293
    Modification, 348-349
    Rules, 292-294
INDEXING, 215-256
    Action Concepts, 239
    Coordinate Indexing, 221-224
    Curriculum Concepts, 239

    Depth of Indexing, 187, 189
    Examination of Documents, 233-234
    False Drops, 224
    Indexable Information, 234-236
    Indexing Depth, 187
    Indexing Tools, 227-231
    Links, 224-225
    Major Terms, 251-254
    Minor Terms, 251-254
    Post-Coordination, 224
    Pre-Coordination, 223-224
    Review, 254-255
    Roles, 224-225
    Specificity, 248-251
INDICATIVE ABSTRACTS, 197-198, 209-210
INFORMATION ANALYSIS PRODUCTS (IAP), 9, 1[illegible]
INFORMATION CENTERS
    DDC, 177
    NASA, 177
    NTIS, 158, 177
INFORMATIVE ABSTRACTS, 197-198, 207-208
INITIALISMS, App. A
INK, COLORED, 96
IN-PROCESS CONTROL, 107-108
INNOVATIVE PRACTICES (SELECTION CRITERIA), 90-91
INSTITUTION, 167-168
INTELLIGENCE/ABILITY LEVEL (INDEXING), 238
INTER-CLEARINGHOUSE TRANSFERS, 129
INTERNATIONAL SYSTEM FOR THE TRANSLITERATION OF SLAVIC CYRILLIC CHARACTERS, 165
ISSUE FIELD, 153
ISSUE REMOVE LIST, 110

-J-

JOURNAL ARTICLE PROCESSING, 351-365
JOURNAL ARTICLE RESUME (FORM), 362-365
JOURNAL CITATION, 186-187, 364
JOURNALS
    Education-related journals, 355
    Core Journals, 355
    "One-Shot" Articles, 357

-K/L-

LABELING. 134
LANGUAGE (OF DOCUMENT), 181

LEGIBILITY, 94-100, 156-157, 182
LEGISLATION (IDENTIFIERS), 296
LEVEL OF AVAILABILITY, 153-158
    Level 1, 154, 179, 183
    Level 2, 155-156, 179, 183
    Level 3, 157, 180, 184
LEXICOGRAPHY, 267-276
LINKAGES, 9
LINKS, 224-225
LINOTRON, 18
LOAN DOCUMENTS, 185
LOGGING, 132, 360

-M-

MACMILLAN INFORMATION, 16-17
MAGNETIC TAPES, 16, 20
MAJOR TERMS, 187, 189, 251-254
MANUSCRIPTS, 97
MASTERS ABSTRACTS, 88
MATERIAL CONCEPTS (INDEXING), 239
METHODS AND THEORIES (IDENTIFIERS), 297
MICROFICHE, 17-18, 23
MINOR TERMS, 251-254
MISSING PAGES, 97
MULTI-VOLUME DOCUMENTS, 164
MULTIPLE AUTHORS, 160

-N-

NARROWER TERMS, 272-276, 316
NASA SCIENTIFIC AND TECHNICAL INFORMATION FACILITY, 177
NATIONAL TECHNICAL INFORMATION SERVICE (NTIS), 67-68, 158, 177, 205
NATIONALITY/RACE (INDEXING), 238
NEW APPLICATIONS OF KNOWLEDGE (SELECTION CRITERIA), 90-91
NIE DOCUMENTS, 130
NUMBERS
    Clearinghouse Accession Numbers, 149-150
    Contract Numbers, 169-170
    ED Accession Numbers, 113-114, 149
    Grant Numbers, 170
    Project Control Numbers, 171
    Report Numbers, 173-177

-O-

OCCUPATIONS (INDEXING), 236
OE FORM 6000, 144

OE FORM 6027, 362-363
ON-ORDER FILE, 107
ON-ORDER RECORD CARD, 52
"ONE-SHOT" ARTICLES, 357
ORGANIZATIONS (IDENTIFIERS), 299-300
OUT-OF-SCOPE DOCUMENT TRANSFERS, 54-55
OVERSIZE PAGES, 97

-P-

PACKING, 132, 134
PAGE SIZE, 97, 179
PAGE(S)
    Missing, 97
    Oversize, 97
    Pagination, 179-180
    Size, 97
    Undersize, 97
PAGINATION, 97, 179-180
    Level III, 180
PAPER
    Colored, 96
    Translucent, 96
PAPERS PRESENTED AT..., 165, 180
PARTIAL COPYRIGHT, 157, 158
PERSONAL AUTHOR, 158-161
    Multiple Authors, 160
PERSONAL NAMES (IDENTIFIERS), 297
PHOTOGRAPHS, 96
PHYSICAL CHARACTERISTICS OF DOCUMENT, 94-100
PHYSICAL/EMOTIONAL CHARACTERISTICS (INDEXING), 238
POLICY STICKER, 126-127
POPULATION CONCEPTS (INDEXING), 236-238
POST-COORDINATION, 224
PRE-COORDINATION, 223-224
PREFIXES (CLEARINGHOUSES), 10, 150, 358-359
PRESENTATIONS, 165, 180
PRICE (EDRS), 171-172
PRIORITIES (SELECTION CRITERIA), 92
PRIORITY DOCUMENTS, 43, 112-113, 128, 156
PRIORITY HANDLING FORM, 113
PROCEEDINGS, 165
PROCESSING MANUAL, ERIC, iii-v
PROJECT CONTROL NUMBER, 171
PROJECTS (IDENTIFIERS), 297

PROGRAM AREA CODE, 151-152
PUBLICATION DATE, 151
PUBLICATION TYPE, 177-178
PUBLICATIONS
    Current Index to Journals in Education, 16-17, 351-365
    ERIC Directory, App. G
    Research in Education, 18-19
    Thesaurus of ERIC Descriptors, 20, 228-229
    Title Index, 24
PUNCTUATION
    Hyphenation, 145
    Semicolon, 145
    Underline, 145
PURCHASE (ACQUISITIONS), 35-36
    Blanket Orders, 36

-Q-

QUALITY OF DOCUMENT CONTENT, 89-93

-R-

RACE/NATIONALITY (INDEXING), 238
REFERENCE SERVICES, 9, 15
REFERENCES
    Anglo-American Cataloging Rules, 141, 162
    Basic U. S. Government Micrographics Standards and Specifications, 94
    Corporate Author Codes (COSATI), 168
    GPO Style Manual, 201, 205
    Standard for Descriptive Cataloging (COSATI), 143
RELATED DOCUMENTS, 181-182
RELATED TERMS, 318-321
RELEVANCE (SELECTION CRITERIA), 90
RELIGION (INDEXING), 238
RELIGIOUS BYNAMES, 159
REMOVE LIST, 110
REPLY CARDS, 114, 116, 129
REPORT NUMBER, 173-177, App. E
REPORT RESUME FORM (EFF-26), 144-148
REPORT SERIES CODES, App. E
REPORT STATEMENT, 163
REPRINTS, 180
REPRODUCTION QUALITY, 156-157
REPRODUCTION RELEASE, 56-58, 153-158
    Blanket Release, 156
REPRODUCTION RELEASE STICKER, 126-127

- *RESEARCH IN EDUCATION*, 18-19
- ROLES, 224-225
- ROTATED DESCRIPTOR DISPLAY, 279
- *RULES FOR THESAURUS PREPARATION*, 281-291

-S-

- SCHEDULE, 135
- SCOPE OF INTEREST, 82-86, 230
- *SCOPE OF INTEREST GUIDE*, App. C
- SCOPE NOTE, 313-314
- SCOPE OVERLAP STICKER, 71, 112, 128-129
- SEARCHING (BY COMPUTER), 15
- SELECTION, 77-100
  - Comprehensiveness, 93
  - Contribution to Knowledge, 89-90
  - Dissertations/Theses, 88
  - Document Evaluation Forms, 84-85
  - Effectiveness of Presentation, 91-92
  - Guidelines (CS), 83
  - Innovative Practices, 90-91
  - Priorities, 92
  - Relevance, 90
  - Significance, 89-90
  - Thoroughness of Reporting, 91-92
  - Timeliness, 92-93
  - Type of Documents, 86-89
- SEMICOLON (USE OF), 145
- SERIES TITLE, 163
- SHIPPING, 130-135 (*See also* HANDLING AND SHIPPING)
  - Schedule, 135
- SIGNIFICANCE (SELECTION CRITERIA), 89-90
- SINGLE-FRAME RESUME, 115
- SMUDGED TYPE, 95
- SOCIOECONOMIC CHARACTERISTICS (INDEXING), 238
- SOURCE CODES/NAMES, 166-169
- *SOURCE DIRECTORY*, 166-169
- SPECIFICITY (INDEXING), 248-251
- SPEECHES, 165, 180
- SPONSORING AGENCY, 169
- STANDARD FOR DESCRIPTIVE CATALOGING (COSATI), 143
- STICKERS
  - Policy, 126-127
  - Reproduction Release, 126-127
  - Scope Overlap, 71, 112, 128-129
- SUBTITLE, 162-163
- SUPPORTING DOCUMENTATION, 186
- SYNONYMS, 317-318

-T-

TENSE, 204
TERM CHANGE NOTICE (FORM), 345-346
TERMINOLOGY, COINED, 295
TERMS
    Broader, 315-316
    Excessively Broad, 254
    Narrower, 316
    Related, 318-321
TESTS AND TESTING PROGRAMS (IDENTIFIERS), 298
TEXT BOOKS (IDENTIFIERS), 298
THESAURUS ADVISORY PANEL, 347
THESAURUS (DISSERTATIONS), 181
THESAURUS OF ERIC DESCRIPTORS, 20, 228-229, 277-291
    Alphabetic Display, 278-279
    Definition, 265
    Descriptor Group Display, 280
    Divisions, 278-280
    Hierarchical Display, 279
    History, 277-278
    Rotated Display, 279
    Rules for Preparation, 281-291
THOROUGHNESS OF REPORTING (SELECTION CRITERIA), 91-92
TIMELINESS (SELECTION CRITERIA), 92-93
TITLE FILE CARD, 108
TITLE INDEX, 24
TITLE (OF DOCUMENT), 161-164
    Conference Title, 165
    Fabricated Title, 162
    Foreign Title, 164-165
    Main Title, 161-162
    Series Title, 163-164
    Subtitle, 162-163
TRADE NAMES, 299
TRANSLATION, 164-165, 181
TRANSLITERATION, 165
TRANSLUCENT PAPER, 96
TRIBES, 295
TYPE
    Broken, 95
    Faint, 95
    Smudged, 95
TYPE SIZE, 94-95
TYPES OF DOCUMENTS (CATALOGING), 177-178
TYPES OF DOCUMENTS (INDEXING), 240-241
TYPES OF DOCUMENTS (SELECTION), 86-89

-U-

UNDERLINE (USE OF), 145
UNDERSIZE PAGES, 97
UNIVERSITY MICROFILMS, 88
UNSOLICITED RECEIPTS, 30
USOE DOCUMENTS, 130

-V-

VOCABULARY IMPROVEMENT PROGRAM, 334-349
VOCABULARY MAINTENANCE, 15, 257-350
VOCABULARY REVIEW GROUP, 344
VOICE, 204

-W/X/Y/Z-

WORKSHOPS, 9
WRAPPING, 135